FINAL REPORT

Aerial Application of Acetaminophen-treated Baits for Control of Brown Treesnakes

ESTCP Project RC-200925

FEBRUARY 2016

Brian S. Dorr
USDA/Wildlife Services/National Wildlife Research Center, Starkville, MS

Craig S. Clark
USDA/Wildlife Services, Honolulu, HI

Pete Savarie
USDA/Wildlife Services/National Wildlife Research Center, Ft. Collins, CO

REPORT DOCUMENTATION PAGE		*Form Approved* *OMB No. 0704-0188*

1. REPORT DATE *(DD-MM-YYYY)* 22-01-2016	**2. REPORT TYPE-** Final Report	**3. DATES COVERED** *(From - To)* April 2013-July 2015.
4. TITLE AND SUBTITLE Aerial Application of Acetaminophen-treated Baits for Control of Brown Treesnakes		**5a. CONTRACT NUMBER (MIPRs)** W74RDV50624680, W74RDV4 I 04S363, W74RDV21091177, W74RDV31927579, W74RDV21603300
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S) Dorr, Brian S., Clark, Craig S., and Savarie, Peter		**5d. PROJECT NUMBER** RC-200925
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USDA/Wildlife Services/National Wildlife Research Center, Starkville, MS USDA/Wildlife Services, Honolulu, HI		**8. PERFORMING ORGANIZATION REPORT NUMBER** QA-1828
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Department of Defense Environmental Security Technology Certification Program Resource Conservation and Climate Change 4800 Mark Center Drive, Suite 17D03 Alexandria, VA 22350-3605 571-372-6401		**10. SPONSOR/MONITOR'S ACRONYM(S)** DOD-ESTCP
		11. SPONSOR/MONITOR'S REPORT NUMBER(S) RC-200925
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release, distribution is unlimited.		
13. SUPPLEMENTARY NOTES		

14. ABSTRACT

The objective of the this Demonstration Project was to validate the use of aerial techniques to deploy acetaminophen–treated dead neonatal mice baits to reduce brown treesnake (*Boiga irregularis*) numbers in forested sites on Guam. Canopy landing and distance between VHF marked baits was 82% and 19.3 m exceeding the success metric of a > 80% and mean distance of 17-23 m, respectively. The success metric of a >80% reduction in bait take rate of VHF marked baits within 4 drops was achieved on the HMU site but not the MSA site (73% reduction). Success metrics of maintaining bait take rates below 30% on both the HMU and MSA for 12 and 4 weeks respectively, were achieved. Indices of snake abundance on the HMU and MSA drop location were significantly less than the reference site for all bait drop periods. A total of 5 rats (*Rattus spp*.) were captured in 2,772 total trap nights of sampling on all 3 locations, indicating no compensatory increase in rodent numbers. Only two non-targets (<2%) were recovered during the 16 month field phase. The demonstration indicates that this technology can be successfully used to control brown tree snakes over large areas. Further refinement of the technology such as automation of bait delivery could provide significant cost savings in operational deployment at larger scales.

15. SUBJECT TERMS

Brown Treesnake, acetaminophen, Aerially applied toxicant, large scale, compensatory increase, non-targets.

16. SECURITY CLASSIFICATION OF: U			**17. LIMITATION OF ABSTRACT**	**18. NUMBER OF PAGES**	**19a. NAME OF RESPONSIBLE PERSON** Brian S. Dorr, Ph.D.
a. REPORT U	**b. ABSTRACT** U	**c. THIS PAGE** U	UU	272	**19b. TELEPHONE NUMBER** *(include area code)* 662-325-8216

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

Table of Contents **Page**

Table of Contents **Page**

Table of Contents **Page**

Tables:

Table of Contents **Page**

Figures:

Table of Contents **Page**

Table of Contents **Page**

Appendices:

ACRONYM LIST

APHIS	Animal and Plant Health Inspection Service
ATOC	Aviation and Training Operations Center
BTS	Brown Treesnake
CFR	Code of Federal Regulations
CNMI	Commonwealth of the Northern Mariana Islands
DNM	Dead Neonatal Mouse (Mice)
DOD	Department of Defense
DOI	Department of the Interior
DOT	Department of Transportation
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESRI	Environmental Systems Research Institute
ESTCP	Environmental Security Technology Certification Program
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FP	Field Procedure
FTE	Full Time Equivalent
GIS	Geographic Information System
GPS	Global Positioning System
HMU	Habitat Management Unit
IPR	In Progress Review
LP	Laboratory Procedure
MOA	Memorandum of Agreement
MSA	Munitions Storage Area
NEPA	National Environmental Policy Act
NWRC	National Wildlife Research Center
QA	Quality Assurance
QAU	Quality Assurance Unit
SD	Standard Deviation
SOP	Standard Operating Procedure
TBO	Time Between Overhaul
TIS	Time in Service
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VHF	Very High Frequency
WS	Wildlife Services

ACKNOWLEDGMENTS

Special thanks to Peter Savarie (USDA/WS/NWRC-Retired) who developed much of the information and technology and initially established the aerial bait drop project. Without Pete's pioneering research efforts this project would not have been possible. We would also like to thank the many other researchers and managers with USDA/WS/NWRC who worked on developing various aspects of brown treesnakes control technologies over the years: R. Engeman, J. Fisher, B. Kimball, R. Stahl, M. Tobin, M. Linnel, J. Brooks, T. Linder, E. Campbell, T. Mathies, J. Shivik, L. Clark, R. Sugihara, K. Dyer, K. Tope, K. Fagerstone, K. Gruver, D.S. Vice, M. Hall, D. York, S. Jojola-Elverum. We thank our funding partner DOD: ESTCP and staff (J. Hall C. Patton, R. Blackburn and review panels) for providing the means to conduct this research and their patience and support throughout. We also thank the DOD-Andersen AFB and U.S. Naval Station Guam for their support and access to the study sites. Last, and definitely not least we thank the unbelievable field crew who put in a phenomenal effort in conducting field operations that made this research a success: F. Chlarson, L. Macaoay, R. Mundo, J. Rabon and R. Volsteadt.

EXECUTIVE SUMMARY

OBJECTIVES OF THE DEMONSTRATION

The objective of the this project was to validate the use of aerial techniques to deploy acetaminophen–treated dead neonatal mice (DNM) baits to reduce brown treesnake (*Boiga irregularis,* BTS) populations in forested sites on Guam. In particular, this project developed an operational aerial control method for depopulating snakes on a landscape level that would reduce the risk of snakes in Department of Defense (DOD) cargo facilities before they enter into areas of military transport. Aerial delivery is a technique for depopulating BTS in large forest areas. Issues validated included the number of baits that landed above ground level, number of aerial deployments for reducing treated bait take by greater than 80%, duration of bait take reductions, compensatory increases in non-native rodent abundance, and impacts to non-target animals.

TECHNOLOGY DESCRIPTION

Thawed DNM were treated by inserting an 80 mg acetaminophen tablet into the body cavity through the mouth. The acetaminophen tablets were a specific formulation made by the United State Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, National Wildlife Research Center (USDA, APHIS, WS, NWRC), chemistry formulation labs in Fort Collins, Colorado. Radio transmitters also were implanted into the body cavity for tracking a subset of the treated DNM. Treated DNM baits were individually attached to 1.2 m-long paper flag streamers with cardboard on each end of the paper streamers, hereafter defined as flag-baits. The paper streamer was folded accordion-style between the cardboard, forming a flat, compact flag-bait. The flag-baits were packaged into trays and frozen until deployed. Flag-baits were deployed by hand from a helicopter over a prescribed forested drop zone at 36 baits per ha, the Environmental Protection Agency (EPA) registered application rate (EPA Registration #56228-34 held by WS, NWRC). The double-ended cardboard streamers form an arc in the air and entangle the treated DNM in vegetation above ground level where they are consumed by brown treesnakes.

Radio-telemetered DNM (a subset of the total dropped) were tracked to determine percent landing in the canopy, distance between baits, and fate of baits. Snake activity on the Habitat Management Unit (HMU) and Munitions Storage Area (MSA) aerial drop sites (55 ha each) and one 55 ha reference site (REF) was determined by untreated DNM taken from bait stations monitored twice monthly as an index of BTS numbers. Rodent numbers were monitored quarterly through capture of rats in live traps to evaluate possible compensatory increases in rodent abundance (as BTS abundance decreases, rodent abundance may increase). Costs were tracked and scaled up to a hypothetical 500 ha drop site to estimate costs of an operational scale control program. Lastly, projected cost savings of advancements in automated bait delivery devices were estimated and applied to a 500-ha drop site operational program.

DEMONSTRATION RESULTS

A total of eight quantitative performance metrics and one qualitative performance metric for the demonstration plan were evaluated. Of the eight quantitative metrics, seven were met or exceeded, and one was marginally successful but complicated by extenuating factors. The qualitative performance metric was met.

Performance objective summary table. See subsequent narrative for details.

Performance Objective	Success Criteria	Criteria Met
Quantitative Performance Objectives		
1) Maximize landing of telemetered baits above ground level	> 80% of telemetered baits deployed above ground level across all drops. Minimum >70% of telemetered baits deployed above ground level per drop	Yes, (See narrative)
2) HMU test site: Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS	No more than four aerial deployments at 2 week intervals for reducing telemetered treated baits taken by BTS by >80%	Yes, (See narrative)
3) MSA test site: Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS	No more than five aerial deployments at 2 week intervals for reducing telemetered treated baits taken by BTS by >80%	No, (See narrative)
4) HMU test site: Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments	At least 12 weeks between deployments for maintaining BTS bait take < 30% before next aerial drop	Yes, (See narrative)
5) MSA (no snake fence barrier aerial test site): Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments	At least 4 weeks between deployments for maintaining BTS bait take < 30% before next aerial drop	Yes, (See narrative)
6) Minimize compensatory increases in non-native rodent abundance	< 20 % increase in rodent abundance	Yes, (See narrative)
7) Minimize non-target impacts (crabs, monitor lizards)	<10% bait take by non-target animals	Yes, (See narrative)
8) Maximize aircrew performance for delivering telemetered baits at regular intervals	Mean range of 17-23 m between telemetered baits	Yes, (See narrative)
Qualitative Performance Objective		
1) Maximize aircrew work performance during aerial bait deployment	Aircrew able to perform duties effectively with minimal boredom/fatigue	Yes, (See narrative)

Success metric 1; maximize landing of telemetered baits above ground level. This metric was successfully met with an 82% canopy landing of baits over all sites and all drops which exceeded the greater than 80% success criteria.

Success metrics 2 and 3; reduction in BTS abundance as measured by reduced telemetered treated DNM bait take by BTS on the HMU and MSA sites. An 83% decline in bait take rate of treated very high frequency (VHF) radio marked baits was observed on the HMU, thus reaching the success metric of an 80% decline within four drops. Reduced BTS abundance as measured by telemetered treated DNM bait take by BTS on the MSA site was marginally successful. The observed decline in bait take rate of treated VHF radio marked baits on the MSA was 73% which did not meet the success metric of an 80% decline in 5 bait drops. However, severe weather prevented bait drops on the MSA during the 3rd drop period resulting in only four bait applications during the first bait drop period. The data for the MSA site clearly indicated a decline in snake numbers and reached a 73% reduction in four applications which can be considered marginally successful.

Success metrics 4 and 5; reducing BTS abundance sufficiently to minimize the interval between aerial maintenance deployments to 12 weeks and four weeks on the HMU and MSA sites, respectively. As was seen with telemetered baits, bait take rate from unadulterated baits in bait stations declined on both the HMU and MSA sites. The success metric of a greater than 80% reduction in bait take rate on the HMU was achieved and this average reduction was sustained for over five months. The MSA reached the target level of an 80% reduction in bait take rate and did so in four aerial bait drops and was sustained for more than four weeks. Longer-term reductions in bait take rate on the MSA were on average less than the HMU but not significantly so. In addition there was not a significant increase in bait take rate on the MSA for over seven months and the bait take rate did not exceed 30% for over eight months. Bait station monitoring indices of brown treesnake abundance clearly show a significant decrease in snake numbers which corroborates findings from VHF marked baits. Original success metrics of maintaining bait take rates below 30% on both the HMU and MSA for 12 and four weeks, respectively were achieved. Long term bait take reductions were also achieved and drop sites were significantly less than the reference site for all drop periods. Original success metrics were met for both sites and more stringent success metrics of a greater than 80% reduction in bait take rate were met on the HMU and largely met on the MSA.

Success metric 6; minimizing compensatory increases in non-native rodent abundance was met. A total of five rats (likely *Rattus diardii*, although species status is in question on Guam) were captured in 2,777 total trap nights of sampling on all three locations. Given that rodents were rare and their numbers did not increase, rodent live-trapping results were not statistically analyzed.

Success metric 7; minimizing non-target impacts (crabs, monitor lizards) was met. Only one non-target, an invasive cane toad (*Rhinella marina*), was found to have consumed a VHF marked toxicant bait of the 105 deployed and recovered. An additional non-target, a juvenile monitor lizard (*Varanus indicus*), was discovered opportunistically, tested, and

found to have been exposed to acetaminophen baits. Counting both of these species the success metric of a less than 10% non-target bait take rate was successfully met.

Success metric 8; maximizing aircrew performance for delivering telemetered baits at regular intervals, was met. The bait delivery success metric of a mean distance between baits of 20 m was successfully met with an actual average distance between baits of 19.3 m (N=105).

Qualitative Performance Objective 1; Maximize aircrew work performance during aerial bait deployment was met. The aircrew's success was demonstrated by the successful completion of demonstration project activities. Crews maintained production levels and enthusiasm for all aspects of the demonstration project through all project phases including: (1) study site establishment of 162, 210 m transects (34 km total), placement of 1,782 bait stations on transects, (2) preparation of 29,700 flagger baits, (3) radio tracking and recovery of 105 VHF marked baits, (4) 15 total aerial bait drops of 1,980 baits each (29,700 total), (5) twice monthly baiting and monitoring of 198 randomly selected bait stations over 24 sessions (6,723 bait stations total), (6) 2,777 total trap nights of rodent sampling on all three locations, and (7) transect and snake barrier maintenance. These activities were among their core duties and don't account for data entry, training, safety, preparation, maintenance, supply acquisition, and the many other ancillary duties involved with the project. All this was done by a core technical staff of five people and one field supervisor. The superlatives to describe the successful and safe conduct of the demonstration project by the core crew cannot be exaggerated and are a testimony to the core crew's performance.

IMPLEMENTATION ISSUES

A substantial regulatory burden must be addressed prior to any field operation. All field operations to control brown tree snakes would be subject to the federally required National Environmental Policy Act (NEPA) process. Wildlife Services requirements are under APHIS NEPA Implementing Procedures at 7 Code of Federal Regulations (CFR) Part 372.5(c)(2)(i). This CFR encompasses projects that result in death of a large number of animals or a large proportion of the population, projects which may adversely affect T&E species, and projects with uncertain environmental impacts. The NEPA document would need to be reviewed and supported by the Department of Interior U.S. Fish and Wildlife Service (DOI, USFWS) including a Biological Opinion and Section 7 Endangered Species Act consultation. A federal take permit would need to be obtained from the DOI-USFWS and a permit from the Guam Department of Agriculture for application of toxicant baits. In addition any staff involved in toxicant application will need to take and pass the Guam Department of Agriculture, Pesticide Applicators Examination. Because of WS's unique position dealing with wildlife damage issues they have their own NEPA staff to address NEPA requirements for large scale control actions.

Currently flag-baits are deployed by hand from a helicopter at 36 baits per ha, the EPA registered application rate (Registration #56228-34) currently held by the WS, NWRC. Any changes to the application rate would need approval through the EPA which can take

2-3 years. The WS, NWRC technology transfer program can aid in this process to obtain approval for changes, potentially reducing the timeframe to approval.

All aerial operations (contractual or in-house) involving WS staff must have a pre operational safety review of pilot and aircrew per WS Aviation Training & Operations Center (ATOC). All aircraft must be maintained in accordance with Federal Aviation Regulation (FAR) part 135 and FAR Part 91 as applicable, to include 100 hour/annual inspections and compliance with the manufacturer's recommendations for Time Between Overhaul (TBO) and Time In Service (TIS). All aircraft and operators covered by this agreement must be certified under the provisions of FAR Part 135, "Operating Requirements: Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft." In addition to Federal Aviation Administration (FAA) requirements all aircraft involving WS staff must conform to requirements of the WS-ATOC safety manual and program.

There was a single private contract supplier for helicopter services with capability for doing bait drops on Guam. Costs associated with this service were much greater than anticipated (See Section 7 Cost Assessment). Meeting the demands of larger scale programs and sole source contractual costs may be problematic. Wildlife Services operates their own fixed and rotary wing aircraft and as such have fully trained support staff, pilots, aircrew and policy and procedures to support flight operations. If large scale operations justifying use of WS aircraft are implemented this could facilitate field performance of operational programs.

Other regulatory considerations include Executive Order 13112 (February 3, 1999) – Invasive Species; Brown Tree Snake Control and Eradication Act of 2004 – H.R. 3479, Section 4; Defense Transportation Regulation Part V Chapter 505 Agricultural Cleaning and Inspection Requirements (29 September 2006); Brown Tree Snake Control and Interdiction Plan, Prepared by: Commander U.S. Naval Forces Marianas, Facilities & Environment N45, August 2004; and Andersen Air Force Base 36 Wing Instruction 32-7004 – Brown Treesnake Management, 15 March 2006. These regulations and directives are for the control of BTS but do not specifically call for the development of aerial delivery of treated baits for landscape control of snakes. Modification may be necessary to encompass large scale operational control programs on Guam.

Other non-regulatory implementation issues include cost of deployment of toxicant baits and monitoring associated with a large scale operational program. Wildlife Services and NWRC and public and private partners are currently working on technologies to help develop refinements to the technology that could result in significant cost savings such as automated technologies. These ideas are discussed in Section 7 Cost Assessment.

Non-target bait take would be a concern in any application of toxicant baits to control brown tree snakes. Addressing the application and monitoring issues above and having an effective monitoring program would be necessary for any operational program. The Demonstration Project indicated that at least on relatively isolated DOD lands non-target bait take rate was very low. However, expansion of programs into different areas and

habitats could increase non-target risk. These risks would need to be evaluated as part of the NEPA and permitting process and may require further research to evaluate. Addressing these issues proactively would reduce potential for delay in initiating operational programs.

Scaling up operational programs may entail toxicant and bait procurement issues. Currently the NWRC is the only manufacturer of the acetaminophen tablets for use in aerial bait drops. NWRC could easily meet demand for tablets on the aerial bait drop but larger scale operations may require expansion of staff, facilities and equipment to meet demand. While equipment for hand baiting was readily available, equipment being developed for automated delivery of baits is not. All automated equipment is custom built and unique to this application and would likely need to be sole sourced to the supplier. This sole supplier situation is likely to remain the case in this niche market without substantial commercial growth potential. Currently automated delivery and equipment are in a research test phase of development by WS, NWRC.

1.0 INTRODUCTION

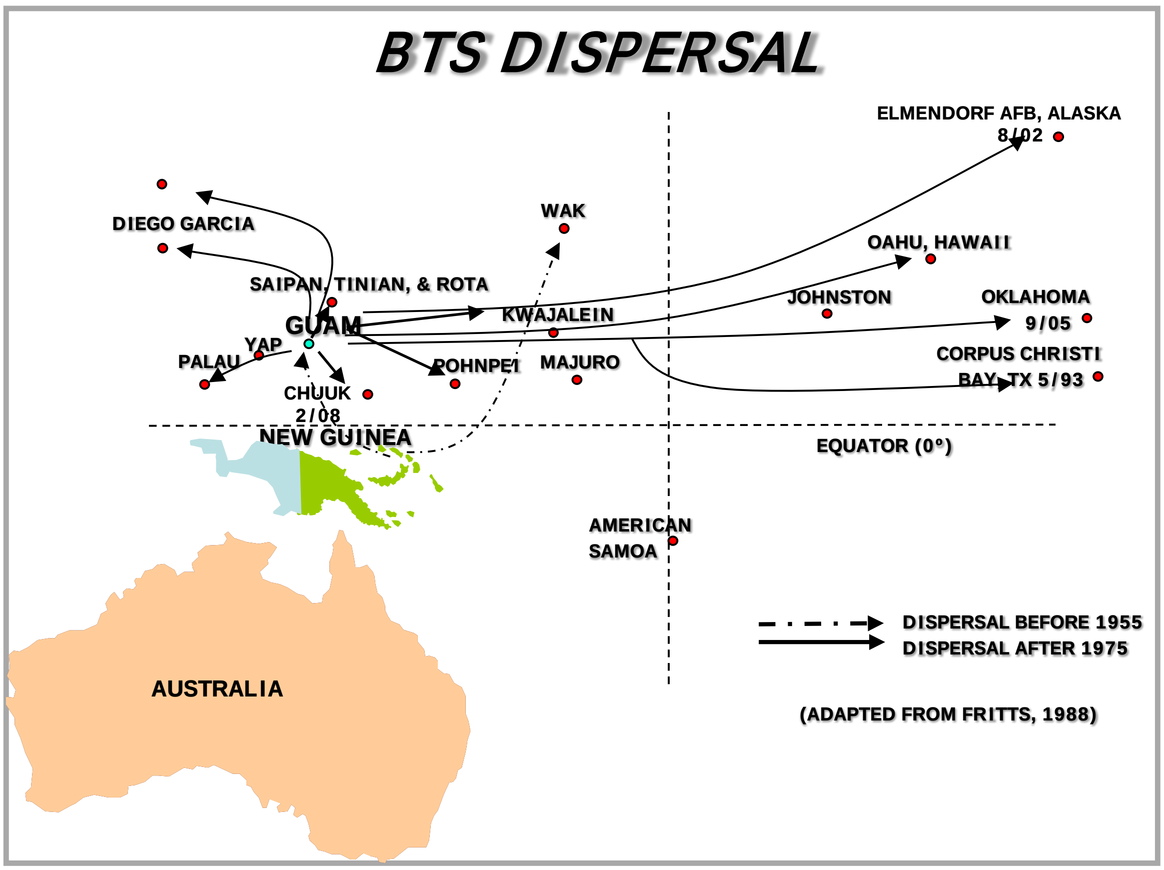
The goal of this demonstration project was to evaluate the aerial deployment of toxic baits in forests as a means to reduce brown treesnake (*Boiga irregularis*, BTS) numbers. BTS were inadvertently introduced to the island of Guam after World War II as passive stowaways in cargo and have caused a major ecological disaster. Snakes have extirpated all but two of the 12 native forest birds and have caused electrical power outages that disrupt public, commercial, and military activities. Guam is the focal point of military and commercial air and ship cargo traffic in the tropical western Pacific and there is the threat that snakes could be inadvertently introduced and establish breeding populations on other snake-free islands in the region. Sightings or captures of brown treesnakes of probable Guam origin include Oahu in Hawaii, and Rota, Tinian, and Saipan of the Commonwealth of the Northern Mariana Islands (CNMI). The dramatic expansion of the U.S. military presence on Guam will increase the flow of outbound cargo, increasing the risk of snake dispersal. This expansion could overtax the present operational control methods (trapping, hand capture of snakes, toxic bait stations, and canine inspection of outbound cargo) for deterring the spread of snakes from Guam. Except for canine inspection, the current control methods reduce snake populations in accessible forest and intercept snakes from the forests adjacent to cargo areas, but do not appreciably depopulate snakes in inaccessible forests. This demonstration utilized thawed dead neonatal mouse (DNM) baits treated with the brown treesnake oral toxicant, acetaminophen, attached to paper flag streamers (U.S. Environmental Protection Agency [EPA] Registration Number 56228-34). The baits were deployed by hand at 36 baits per hectare (ha, 1 ha = 2.47 acres) from a helicopter over two 55 ha aerial test sites. The baits entangle in the canopy forest vegetation where they can be consumed by snakes. The aerial baiting technology will provide the U.S. Department of Defense (DOD) two major benefits for reducing environmental and economic risks caused by BTS. First, it will provide an additional substantial level of defense against snakes getting into outbound military cargo by reducing snake populations adjacent to cargo facilities. Secondly, this technology is unlimited in an operational sense. While currently only demonstrated on DOD properties, there is the potential for aerial application to all areas on Guam. BTS operational control has been ongoing since 1993 and will extend into perpetuity unless island-wide control is initiated because the current control methods (trapping, hand capture, bait stations, and canine detection) are not appropriate for all terrain types and at very large landscape scales.

1.1 BACKGROUND

The brown treesnake is a nocturnal, arboreal invasive predator on the island of Guam that was probably introduced after World War II as a passive stowaway in cargo from the Admiralty Islands north of New Guinea (Fritts 1988, Rodda et al. 1992). Lacking natural predators on Guam, the population of the brown treesnake exploded, reaching as many as 50-100 snakes per ha in some areas (Rodda et al. 1992). Snakes colonized the entire island of Guam (54,930 ha) in about 20-30 years (Savidge 1987). The brown treesnake has gained the unfortunate distinction of being the only reptile known to have caused the extinction of another vertebrate species. Ten of 12 native birds have disappeared from the forests on Guam and the impact of the snake has also been devastating to the island's

lizards (Rhodda and Fritts 1992). In addition, this cryptic, mildly venomous snake has caused millions of dollars in damages to the island's electrical infrastructure, bitten hundreds of people, and is a health threat to infants and young children (Fritts 1988, Fritts 1990, Fritts and McCoid 1999). The abundance of snakes on Guam, coupled with their tendency to seek daytime refuge in cargo, creates significant risk of dispersal from the island (Vice and Vice 2004, Figure 1). Guam is the focal point of air and ship cargo traffic in the tropical western Pacific and there is the threat that snakes could be inadvertently introduced and establish breeding populations on other snake-free islands in the region. Although no incipient populations are known, sightings or captures of brown treesnakes associated with commercial and military cargo traffic from Guam have been recorded on Oahu in the Hawai'ian Islands, Kwajalein in the Marshall Islands, Pohnpei and Chuuk in the Federated States of Micronesia, Diego Garcia in the Indian Ocean, Okinawa in the Ryukyu Islands of Japan, Rota, Tinian, and Saipan of the CNMI, Texas, Oklahoma, and Alaska in the U.S. , and as far away as Spain (Fritts et al. 1999). The continued movement of BTS from Guam threatens the biodiversity and economic security of the region (Savidge 1987, Vice and Vice 2004). If BTS became established in Hawai`i, the potential economic damage was estimated to be $593 million to $2.14 billion per year (Shwiff et al. 2010).

Figure 1. Dispersal of brown treesnakes from Guam through the transportation system



In 1993, the U.S. Department of Agriculture (USDA), Wildlife Services (WS), initiated an operational program to deter the spread of snakes from Guam using hand capture from fences during nighttime spotlight searches, trapping, and inspection of cargo with search dogs (Hall, 1996). Ongoing control efforts in and around Guam's outbound cargo areas continue to capture thousands of snakes annually, and the problem remains critical on all Guam's military installations – in FY2009, 2,736 brown treesnakes were intercepted on Navy installations, and 7,555 on Air Force installations (D. Vice, pers. comm.). The majority of these were intercepted around the Navy wharves and cargo staging sites around Apra Harbor, and around the flight line, warehouses, and cargo staging facilities at Andersen Air Force Base. Adjacent to the cargo areas are forests that are inaccessible for operational control using traps and bait stations. These forests are the likely source of snakes that could disperse off-island through outbound cargo. With the pending increase of U.S. military presence on Guam, there will be increased movement of personnel and household goods, which will increase the potential for dispersal of brown treesnakes through outbound cargo. Of particular concern is the deployment of military personnel and equipment from Guam to the island of Tinian in the CNMI for training exercises and increased traffic through Hawai'i. Aerial application of treated baits in these inaccessible forests will reduce snake populations in large areas adjacent to commercial and military warehouses and cargo staging facilities, and this will reduce the risk of snake dispersal to at-risk locations such as Tinian and Hawai'i.

1.2 OBJECTIVE OF THE DEMONSTRATION

The objective was to demonstrate the use of aerial techniques to deploy acetaminophen–treated dead neonatal mice (DNM) baits to reduce snake populations in forested sites on Guam. The overall objective was to develop an operational aerial control method for depopulating snakes on a landscape level which would reduce the risk of snakes in DOD cargo facilities before they enter into areas of military transport. Aerial delivery is a technique to depopulate snakes in large forest areas. Issues that were validated were number of baits that land above ground level, number of aerial deployments for reducing treated bait take by 80-90%, compensatory increases in non-native rodent abundance, and impacts to non-target animals.

1.3 REGULATORY DRIVERS

Memorandum of Agreement (MOA) on Brown Treesnake Control (1999, signed by Department of the Interior [DOI], DOD, USDA, Department of Transportation [DOT], and Governors of Guam, CNMI, and Hawaii; new MOA was developed); Executive Order 13112 (February 3, 1999) – Invasive Species; Brown Tree Snake Control and Eradication Act of 2004 – H.R. 3479, Section 4; Defense Transportation Regulation Part V Chapter 505 Agricultural Cleaning and Inspection Requirements (29 September 2006); Brown Tree Snake Control and Interdiction Plan, Prepared by: Commander U.S. Naval Forces Marianas, Facilities & Environment N45, August 2004; and Andersen Air Force Base 36 Wing Instruction 32-7004 – Brown Treesnake Management, 15 March 2006. These regulations and directives are for the control of BTS but do not specifically call for the development of aerial delivery of treated baits for landscape control of snakes.

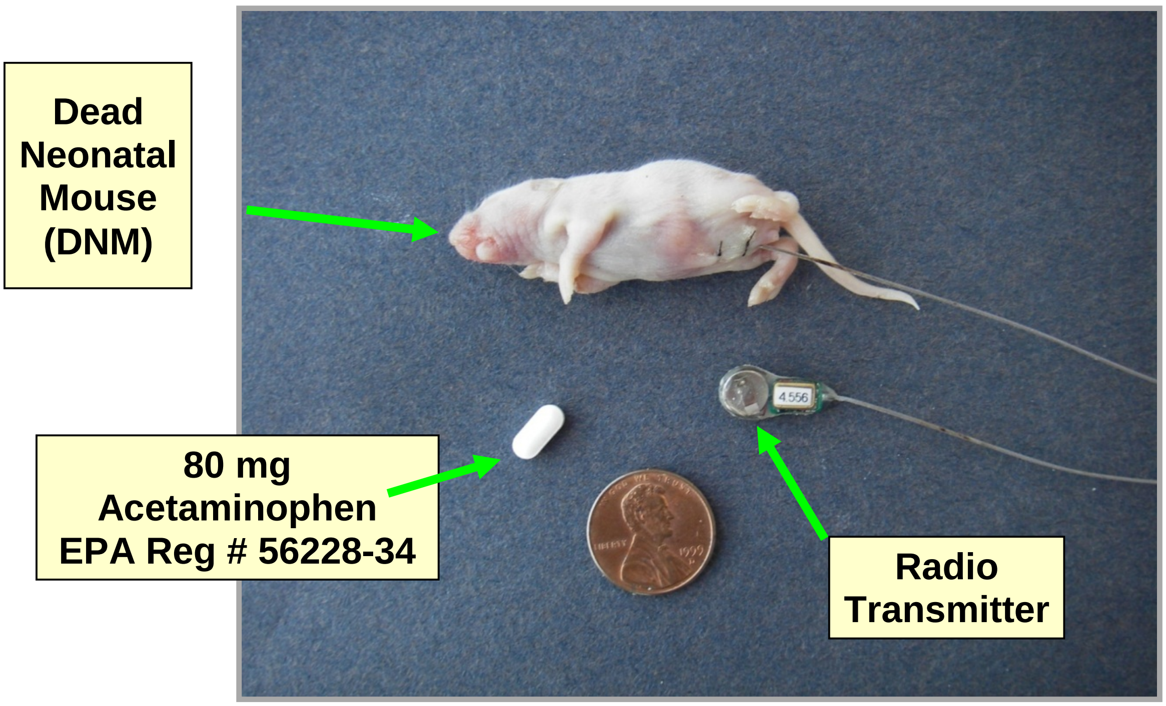
2.0 TECHNOLOGY/METHODOLOGY DESCRIPTION

Technology and methodology was the aerial application of DNM treated with acetaminophen for landscape control of BTS in forests on Guam.

2.1 TECHNOLOGY/METHODOLOGY OVERVIEW

Thawed DNM were treated by inserting an 80 mg acetaminophen tablet into the body cavity through the mouth. Radio transmitters were implanted into the body cavity for tracking a subset of the treated DNM (Figure 2).

Figure 2. Dead neonatal mice treated with acetaminophen deployed as baits for brown treesnakes.



Treated DNM baits were individually attached to 4 ft. long paper flag streamers with cardboard on each end of the paper streamers, hereafter defined as flag-baits (Figure 3). The paper streamer was folded accordion-style between the cardboard, forming a flat, compact flag-bait (Figure 4).

Figure 3. The rear legs and nose of a treated DMN were glued to the smaller cardboard at the end of the paper streamer.

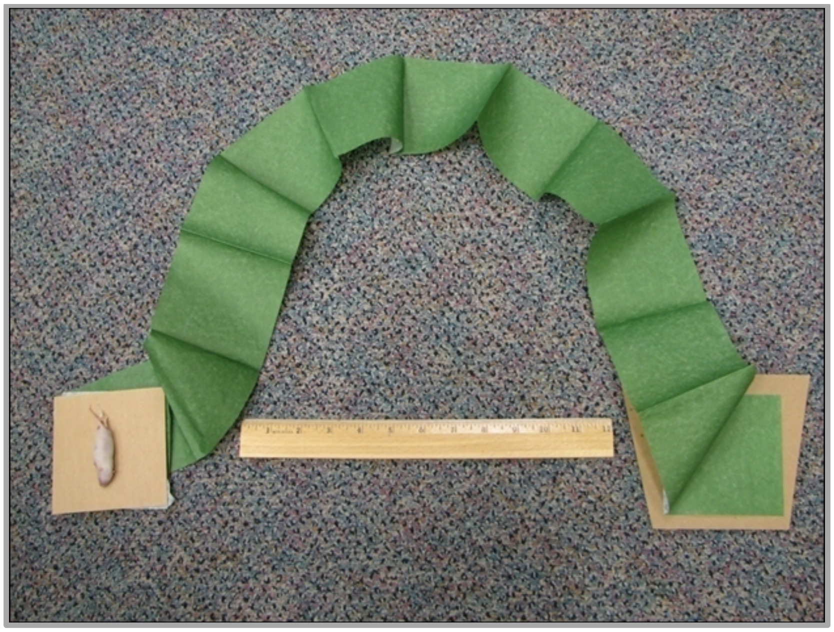


Figure 4. Compressed flag-bait.

The flag-baits were packaged into trays and deployed by hand from a helicopter over a prescribed forested drop zone at 36 baits per ha (Figure 5). The double-ended cardboard streamers form a loop in the air and entangle the treated DNM in vegetation above ground level where they can be consumed by brown treesnakes (Figure 6).

Figure 5. Flag-baits being dropped by hand from a helicopter over the forest. Arrow points to a flag-bait that has formed an arc after being dropped.

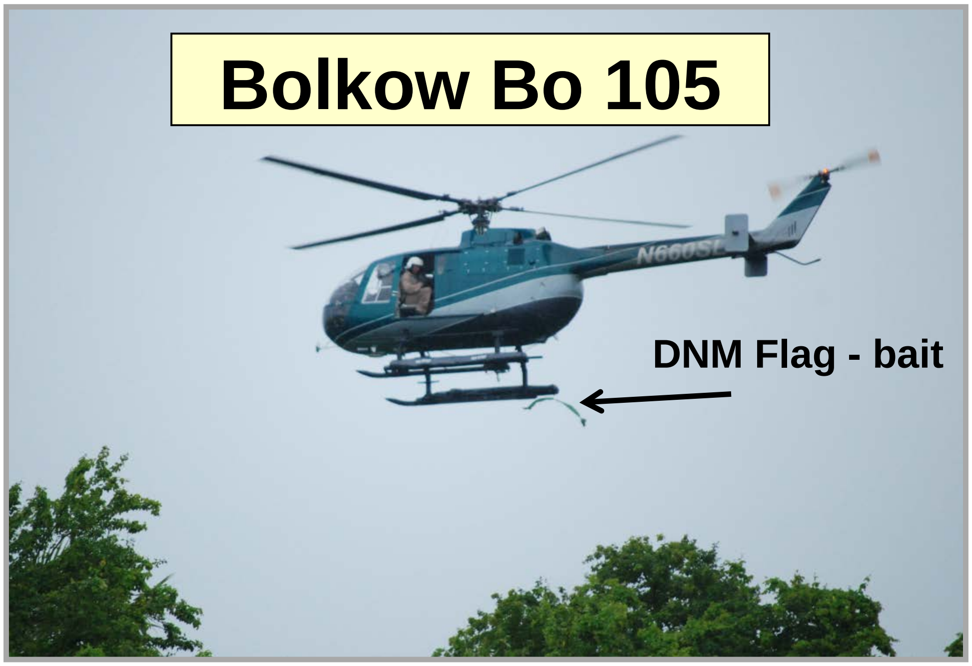


Figure 6. Flag-bait entangled in vegetation.

2.1.1 Overall Flow Diagram for the Technology

80 mg acetaminophen tablets formulated at the National Wildlife Research Center (NWRC) → individual tablets inserted into DNM (DNM shipped frozen from the U.S. to Guam and maintained frozen until treated with tablets) → rear legs of DNM hot glued to small piece of cardboard of double-ended cardboard streamer → treated DNM baits stacked in trays and placed in freezer until field deployment → trays loaded into helicopter and baits deployed by hand over forest drop site → radio telemetered DNM (a subset of the total dropped) tracked to determine dispersal pattern and bait take → snake activity on two aerial drop sites and one reference site determined by untreated DNM taken from bait stations and capture of rats in live traps (as snake abundance decreases, rodent abundance may increase).

2.1.2 Chronological Summary of Technology Development

From 1995-1998 the DOD Legacy Program provided funding to the USDA/ NWRC, Fort Collins, Colorado, for development of chemical methods to control BTS. The goal of this project was to identify and develop chemical control methods (oral and dermal toxicants, attractants, repellents, and fumigants) that could be used in an integrated program to control and prevent the dispersal of BTS from Guam and reduce or help control snake populations in various island situations (Engeman and Vice 2001). This project was highly successful and included the identification of formulations of pyrethrins as a dermal toxicant (Brooks et al. 1998a, 1998b), natural products as repellents (Clark and Shivik 2002), and acetaminophen as an oral toxicant (Savarie et al. 2000). From 1999-2003 the DOD Legacy Program funded NWRC for field evaluations of chemicals, bait matrices, and delivery methods for BTS control. During this period bait station and aerial broadcast field evaluation trials of acetaminophen-treated baits on 6 ha forest plots resulted in 80%-90% reduction of BTS within 4-5 weeks (Savarie et al. 2001, Clark and Savarie 2012). Based on these field trials and other data requirements, acetaminophen was registered by EPA in 2003 as an oral toxicant in DMN baits for BTS control in bait stations and broadcast application by hand, helicopter, and fixed-winged aircraft (EPA Registration Number 56228-34).

From 2001-2007, 7 hand drop aerial delivery studies were conducted on Guam. Two proof-of-concept aerial delivery studies have been conducted. The first, conducted in 2001, deployed non-toxic DNM baits using non-biodegradable plastic streamers and parachutes and demonstrated that baits entangled in the forest canopy were consumed by BTS (Shivik et al. 2002). The second aerial delivery study was conducted in 2002 and was the only study using treated DNM. It showed that after four drops totaling 900 - 80 mg acetaminophen-treated DNM on 6 ha of forest, snake activity was reduced by about 80% (Clark and Savarie 2012). A problem with the second aerial delivery was that the corn starch flotation material attached to the DNM dissolved rapidly in the rain and the DNM dropped to the ground. Daily rainstorms are common on Guam and the flotation material must remain intact for 2-3 days before disintegrating. Biodegradable materials were needed to reduce the potential accumulation of litter in the forest. In 2003, five biodegradable flotation materials (paper ring, paper cup, excelsior (wood shavings), burlap, and paper food cup) were evaluated (Savarie and Tope 2004). The highest entanglement in the canopy was only 60% (12 of 20) with the paper food cup.

The DOI/Office of Insular Affairs funded NWRC for bait matrix and aerial delivery development from 2004-2006. In 2004, a study was conducted on low and high crab abundance sites to determine baits taken by non-target animals. Forty radiotelemetered DNM attached to jute mesh and 40 radiotelemetered DNM without jute mesh were deployed. All DNM without jute mesh landed on the ground and 21% of DNM attached to jute mesh landed in the canopy. Comparisons of baits taken between low vs high crab abundance sites was as follows: BTS, 24% vs 0%; crab, 24% vs 67%; monitor lizard, 0% vs 11%; marine toad, 3% vs 0%; ants, 21% vs 14%; unknown, 3% vs 8%; not taken, 26% vs 0% (Savarie et al. 2007). It was evident from these data that a parachute that delivers the majority of the DNM baits to the canopy was needed and that crabs remove mice, making them unavailable for BTS consumption.

In 2005, two small biodegradable parachutes fabricated from paper towels and Ecofilm® (corn derived plastic-like material that decomposes by bacterial degradation) were evaluated, and in 2006, 4 commercial biodegradable paper products including single- and double-ender paper streamer marker flags were tested. Entanglement in the canopy for these six products ranged from 67% with paper cups to 95% with the double-ender marker flags (Savarie et al. 2007).

An advantage of the single- and double-ender marker flags was that they can be deployed from an electro-mechanical dispenser mounted on a helicopter. In 2007, the U.S. Navy provided funding for evaluation of single-ender flags. Untreated DNM attached to single-ender flags were deployed from a helicopter by two mechanical dispensers and hand on 4 ha of forest at 36 baits per ha. There were a total of six drops (three each by dispenser and hand) and 144 flag-baits, including 28 DNM with radio transmitters, were deployed per drop. Canopy landing of the radioed DNM was 85% (61 of 72) by dispenser and 79% (66 of 84) by hand. An important finding from this study was that DNM body fluids from a flag-bait can be transferred to an adjacent flag-bait causing sticking between the two flag-baits. This can cause the dispenser to jam and the flag baits are not ejected properly from the dispenser. Another disadvantage of the dispensers was that only 144 flag-baits can be delivered before re-loading. This increases time for deployment. Since several hundred flag-baits can be stored in containers in the helicopter, they were deployed by hand for the demonstration to decrease helicopter time.

2.1.3 **Expected Applications of the Technology**

The aerial baiting technology deployed on a landscape level in forests will provide the DOD two major benefits for reducing environmental and economic risks caused by BTS. First, it will provide an additional substantial level of defense against snakes getting into outbound cargo by reducing snake populations adjacent to cargo facilities. This will decrease the probability of dispersal of snakes from Guam to vulnerable areas (e.g., Hawai'i) where there are no protections to prevent the ecological and economic devastations caused by the snakes on Guam. Secondly, this technology is unlimited in an operational sense. While initially deployed on DOD properties, the ultimate future goal of aerial application is to all inaccessible forests on Guam.

2.2 TECHNOLOGY/METHODOLOGY DEVELOPMENT

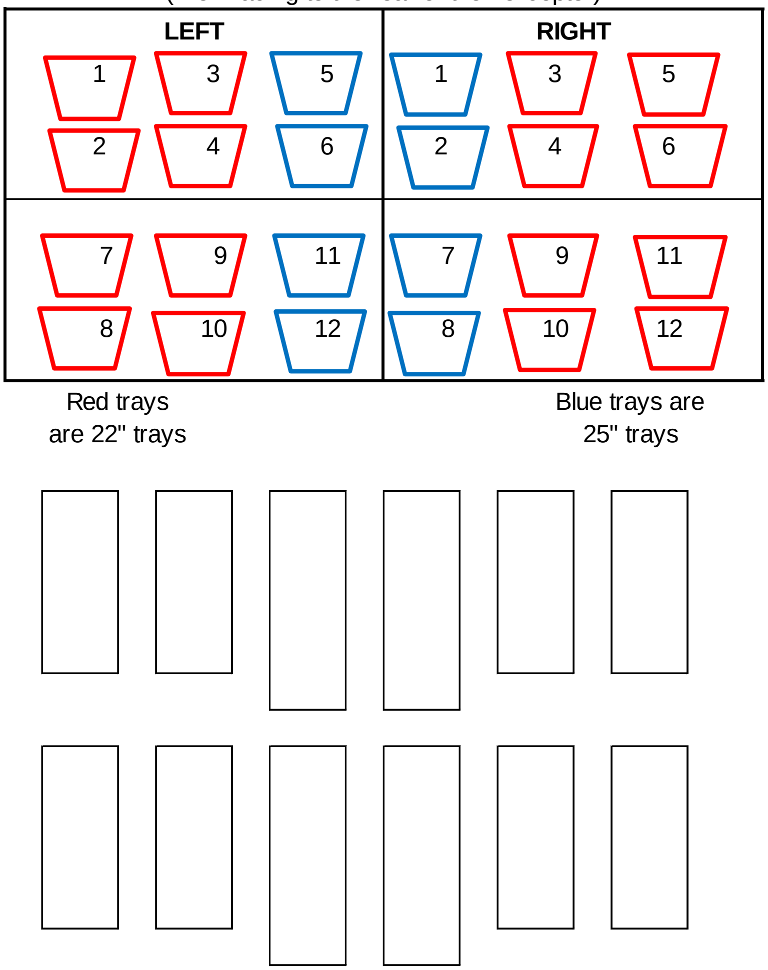
Much of the major technology development (e.g. testing of toxicant, bait types, bait delivery methods, and bait stations and monitoring methods) occurred prior to initiation of the Environmental Security Technology Certification Program (ESTCP) project and is covered in section 2.1.2 above. There were some relatively minor modifications to some aspects of the demonstration project that were developed during preliminary trial runs and dictated by situational and operational conditions related to performance; these are discussed below.

Pre-project bait drop trials used a different helicopter and bait handling system and fewer baits. The Bolkow 105 helicopter used in the demonstration project required development of a flagger bait tray handling system that would allow storage of large numbers of baits in onsite freezers and easy transfer to the cargo area of the Bolkow 105 helicopter. In addition, the tray system needed to be designed to allow identification of specific baits and drop transects by number so randomly selected transect segments could be determined for drops of VHF marked baits. Lastly, in order to allow time for all baits to be dropped on a site and immediate post drop VHF telemetry tracking to verify bait placement, only one site could be done per day. Each site required two flights to complete a bait drop (i.e. 1,980 baits total). Figure 7 below provides an example schematic of flagger bait and tray arrangement for a single bait drop on the HMU site.

Typically Haguruma type traps baited with coconut and with a pre-baiting regime are the preferred methods for Pacific island rodent trapping (Wiewel et al. 2009). However, Haguruma type traps were no longer available necessitating a modification of the standard Tomahawk® type traps to a Haguruma type trigger configuration (Figure 8). The modified and standard traps were compared at an offsite location to evaluate modification performance.

Figure 7. Example schematic of flagger bait and tray arrangement for a single bait drop on the HMU site.

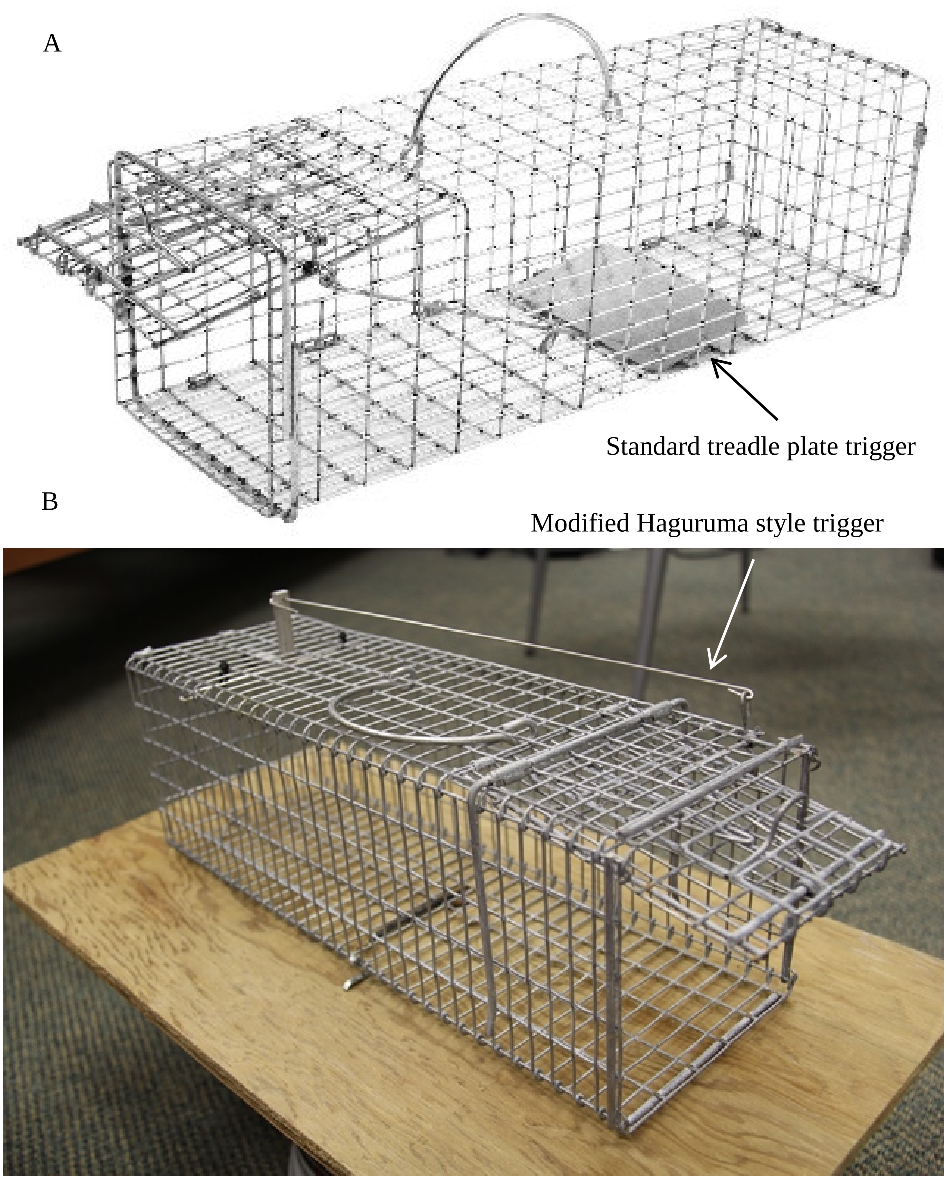
(View facing to the rear of the helicopter)



Planar view of flagger trays

HMU		Right Side (pilot)	Left Side
Transect	Baits		
1	82	41	41
2	80	40	40
3	80	40	40
4	82	41	41
5	83	41	42
6	83	41	42
7	84	42	42
8	85	42	43
9	86	43	43
10	87	43	44
11	89	44	45
12	91	45	46
Total	1012		

Figure 8. Comparison of standard #33 Tomahawk® rodent live trap (Panel A) and the modified Tomahawk® trap Panel B).



2.2.1 Advantages and limitations of the technology/ methodology

The primary advantage of the aerial delivery technology is that it can be deployed over inaccessible forests. If snake barriers, such as fences or concrete walls are in place, there would be a permanent reduction in snake population. The limitations of this technology were that flag-baits were hand dropped and the high cost of helicopter flight time.

3.0 PERFORMANCE OBJECTIVES

The objective of this demonstration was the efficient deployment of targeted aerial toxicant baits to reduce BTS populations in a large forested landscape. Reduced populations of snakes in areas adjacent to cargo areas may reduce the likelihood of BTS accidently becoming stowaways in outbound cargo from Guam and infesting another vulnerable site. Performance objectives, metrics, data requirements, and success criteria are listed in Table 1 below.

Table 1. Performance objective summary table

Performance Objective	Metric	Data Requirements	Success Criteria	Criteria Met
Quantitative Performance Objectives				
1) Maximize landing of telemetered baits above ground level	Percentage of telemetered baits deployed ground level	Telemetry of radio marked baits above ground	> 80% of telemetered baits deployed above ground level across all drops. Minimum >70% of telemetered baits deployed above ground level per drop	Yes, See section 6.0, p. 41
2) HMU test site: Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS	Percentage of telemetered treated baits taken by BTS after deployment	Number of telemetered treated baits taken by BTS using radio telemetry	No more than four aerial deployments at 2 week intervals for reducing telemetered treated baits taken by BTS by >80%	Yes, See section 6.0, p. 44-45
3) MSA test site: Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS	Percentage of telemetered treated baits taken by BTS after deployment	Number of telemetered treated baits taken by BTS using radio telemetry	No more than five aerial deployments at 2 week intervals for reducing telemetered treated baits taken by BTS by >80%	No, See section 6.0, p. 44-45
4) HMU test site: Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments	Percentage of untreated DNM baits taken by BTS from bait station transects	Monitor number of untreated DNM baits taken from bait station transects	At least 12 weeks between deployments for maintaining BTS bait take < 30% before next aerial drop	Yes, See section 6.0, p. 51

Table 1. cont.

Performance Objective	Metric	Data Requirements	Success Criteria	Criteria Met
5) MSA (no snake fence barrier aerial test site): Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments	Percentage of untreated DNM baits taken by BTS from bait station transects	Monitor number of untreated DNM baits taken from bait station transects	At least 4 weeks between deployments for maintaining BTS bait take < 30% before next aerial drop	Yes, See section 6.0, p. 51
6) Minimize compensatory increases in non-native rodent abundance	Index of increased rodent abundance as BTS were removed in HMU and MSA test sites	Number of rats captured from live trap transects in HMU and MSA test sites	< 20 % increase in rodent abundance	Yes, See section 6.0, pp. 53-54
7) Minimize non-target impacts (crabs, monitor lizards)	Number of non-targets identified	Number of radioed baits taken by non-targets	<10% bait take by non-target animals	Yes, See section 6.0, p. 54
8) Maximize aircrew performance for delivering telemetered baits at regular intervals	Uniform interval between telemetered baits after aerial deployment	Radiotelemetry to determine distance of telemetered baits using	Mean range of 17-23 m between telemetered baits	Yes, See section 6.0, pp. 54-55
Qualitative Performance Objective				
1) Maximize aircrew work performance during aerial bait deployment	Ability of aircrew to ward off boredom/fatigue during bait deployment	Feedback from personnel on effort to deploy baits	Aircrew able to perform duties effectively with minimal boredom/fatigue	Yes, See section 6.0, pp. 55

Quantitative Performance Objectives

1) Maximize landing of telemetered baits above ground level:

DNM acetaminophen-treated baits were attached to paper streamers with cardboard on each end that entangle the bait above ground level to mitigate bait take by non-target animals such as crabs and monitor lizards. Twenty (20) radio telemetered DNM [10 each on the Habitat Management Unit (HMU) and Munitions Storage Area (MSA)] were deployed at approximately 20 m intervals on each aerial drop on randomly selected 180 m transects along the flight path. Immediately after the drop, DNM were tracked by radio and location (above ground level or ground landing) was recorded. Criterion for success was that the mean for baits above ground level was >80 % across all drops. Minimum performance expected was 70% of telemetered baits above ground level per drop. Six aerial drops were conducted on the HMU and five on the MSA with 10 telemetered baits per drop for a total of 110 telemetered baits dropped.

2) HMU (snake fence barrier aerial test site): Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS

Radiotelemetered DNM were tracked for 1-4 days after each aerial deployment and bait take by BTS and non-target animals was recorded. Trend in snake numbers was measured by a corresponding change in the percentage of radio- telemetered treated DNM consumed by snakes. For example, if bait take was 70% after the first drop and 10% after the fourth drop, the reduction in bait take would be 85.7% (70% - 10% = 60%; 60%/70% = 85.7%). The criterion for success was that no more than four aerial drops were needed for reducing treated bait take by >80%.

3) MSA (no snake fence barrier aerial test site): Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS Data acquisition needs were similar to 2) above. The criterion for success was that no more than five aerial drops were needed for reducing bait take by >80%.

4) HMU (snake fence barrier aerial test site): Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments. Snake activity was monitored by the number of untreated DNM taken by BTS from bait stations on transects in the HMU. Untreated bait take was expressed as percentage of baits taken. Bait take was recorded pre-aerial drop and approximately every two weeks (weather permitting) for the duration of the study. Aerial drops continued until untreated bait take was < 30%. Aerial drops were initiated again when the bait take was > 30%. The criterion for success was that there was at least 12 weeks between aerial drops for maintaining bait take < 30%.

5) MSA (no snake fence barrier aerial test site): Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments

Data acquisition needs were similar to 4) above. The criterion for success was that there would be at least 4 weeks between aerial drops for maintaining bait take < 30%.

6) Minimize compensatory increases in non-native rodent abundance

It was expected that if snake populations were drastically reduced by the treated baits there would be an increase in rodent abundance. Rodent live traps were used to capture rats from the HMU, MSA and reference sites and cumulative captures throughout the study were recorded. Criterion for success was a <20% increase in rodent abundance across all drops.

7) Minimize non-target impacts (crabs, monitor lizards)

Radiotelemetered DNM flag-baits entangle in vegetation above the ground to mitigate exposure to non-target animals. Bait take by snakes and non-targets of these telemetered baits was determined by tracking the signal and locating the radio transmitter. The number of baits taken by non-targets were recorded. Criterion for success was <10% bait take by non-target animals across all drops.

8) Determine aircrew performance for delivering radioed baits at regular intervals

Treated baits were deployed at 36 baits per ha, or about one bait every 20 m. To evaluate distribution of baits, 10 telemetered treated baits were included in the 1,980 treated baits dropped per application on each of the two 55 ha aerial drop test sites. The 10 telemetered treated baits were dropped in a randomly selected 180 m straight line transect on the flight path for each aerial application. Immediately after the drop, DNM were tracked by radio and location was recorded. Distance between baits was then calculated from location data. Criterion for success was that the mean distance between baits would be 20 m $\pm$ 3 m all drops.

Qualitative Performance Objectives

1) Maximize aircrew work performance during aerial bait deployment

It was estimated that would take 4.5-5 h to deploy the baits on each 55 ha site. Baits were dropped by hand at 20 m intervals on 1,000-1,140 m long flight paths that were spaced 20 m apart. Fatigue could be a problem that would jeopardize safety and performance of the operation. Feedback from the aircrew was assessed to determine if down times after 1-2 h of flight time would be necessary to reduce fatigue.

4.0 SITE DESCRIPTION

Three 55 ha sites on the northern end of the island of Guam in the western Pacific were selected (Fig. 7). Guam is located at approximately 13 degrees north latitude and 144 degrees east longitude. Guam is about 48 km long and 6 to 19 km wide and has an area of 549 square km. Two aerial drop sites were on Air Force property and the reference site was on Navy property (Fig. 7).

Each of the three sites was contiguous with forest habitat that supports brown treesnakes. The two aerial drop sites on Air Force were about 0.7-1.4 km from areas that were being live trapped for snake control. The reference site on Navy was about 1.5 km from snake trapping operations. Habitat on the three sites was characteristic of snake habitat that supports snake populations. Roads were available to access each of the three sites. The distance between sites was not problematic because no assumptions were being made regarding snake abundance. The aerial technique targeted whatever snakes were present.

4.1 SITE LOCATION AND HISTORY

The two aerial drop sites were located on Andersen Air Force Base where munitions were stored and the Reference Site was on the Naval Computer and Telecommunications Station (Figure 9) which provides continuous global and universal communications services to fleet units, shore activities, and joint forces. Andersen Air Force Base provides support to bomber crews deploying overseas, operational support group, search and rescue operations, and Pacific Theater coordination and training opportunities. The terrain on the two drop sites and Reference Site was relatively flat and elevation was about 460-500 ft. (140 – 153 m). The sites were probably disturbed by construction activities during World War II. There were no operations on the two aerial drop sites and the Reference Site that impacted the demonstration.

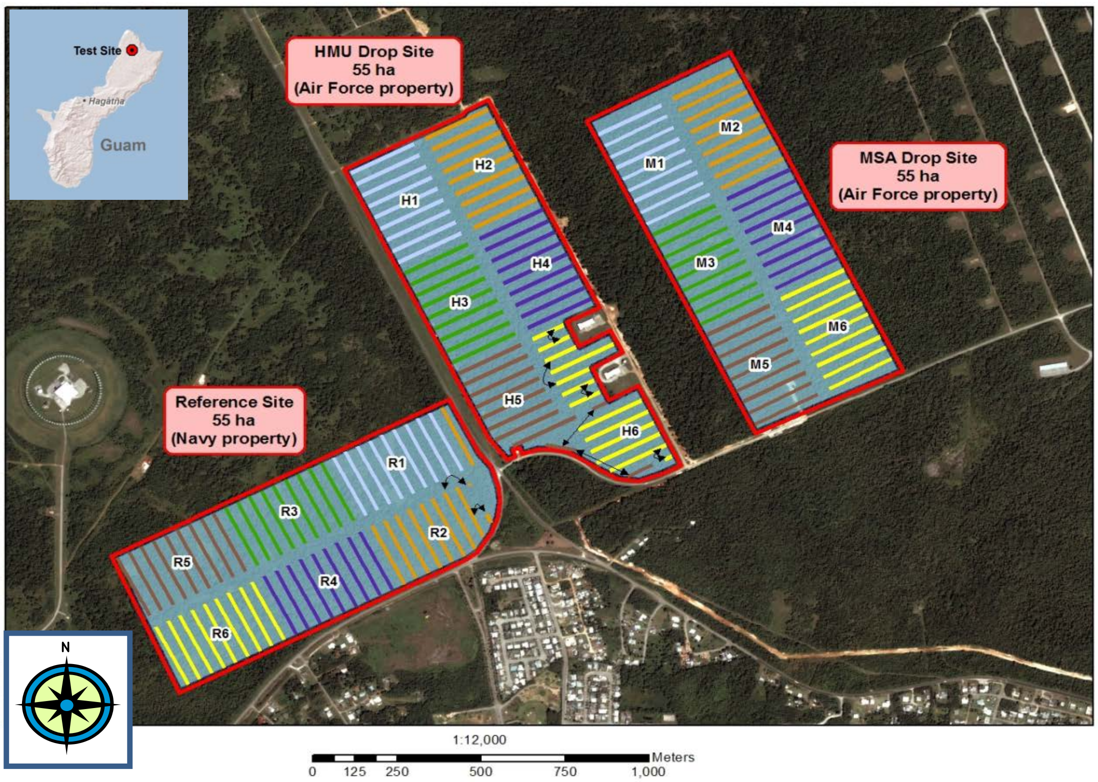
Access for personnel working on each of the three sites was obtained from the appropriate Air Force and Navy commands. Wildlife Services submitted an Environmental Assessment, “Targeted Aerial Broadcast of Acetaminophen for Brown Treesnake Control on Guam.” Final determination for the Environmental Assessment was April 15, 2011. USDA/WS also contacted Guam Department of Aquatic and Wildlife Resources, U.S. Fish and Wildlife Ecological Services, Honolulu, HI, and Air Force and Navy resource managers on Guam regarding this aerial demonstration.

4.2 SITE CHARACTERISTICS

The vegetation is described by the local Chamorro name (**bold**) and the scientific name (*italics*). The three sites were classified as secondary limestone forest, dominated by large, invasive **ahgao manila** (*Vitex parviflora*). Other dominant emergent trees include **nunu** (*Ficus prolixa*), **dukduk** (*Artocarpus mariannensis*), and **yoga** (*Elaeocarpus yoga*), however, **ahgao manila** was by far the most dominant tree. The forest canopy was relatively high, with most areas averaging a height of approximately 15 m. Understory trees include **kaffo’** (*Pandanus tectorius*), **fadang** (*Cycas micronesica*), **fago’** (*Neisosperma oppositfolia*), **paipai** (*Guamia mariannae*), **mapunyao** (*Aglaia mariannensis*), *Eugenia spp.* and **niyok** (*Cocos nucifera*). Herbaceous growth includes

gapit atayaki (*Wikstroemia spp.*), **tintan-china** (*Cestrum diurnum*), **masikisk** (*Chromolaena odortata*), *Stachytarpheta spp.*, and numerous ferns. There were no conditions that impacted the demonstration. The climate is characterized as tropical marine. The weather is generally hot and very humid with little seasonal temperature variation. The mean high temperature is 86 °F (30 °C) and mean low is 76 °F (24 °C) with an average annual rainfall of 96 inches (2,438 mm).

Figure 9. Test sites for evaluation of the use of aerially applied acetaminophen-treated DNM baits for control of brown treesnakes. Lines in colored quadrants (i.e. M1, M2 etc.) represent 210 m transects on which snake and rodent monitoring was conducted.



5.0 TEST DESIGN

The test design and methods used for this demonstration were variations from previous studies (Savarie et al. 2001, Clark 2003, Savarie et al. 2007) that have been adapted to this demonstration. Sections 5.1 through 5.6 provide detailed review of test design and methods.

5.1 CONCEPTUAL TEST DESIGN

Acetaminophen-treated DNM baits were deployed by hand from a helicopter at the rate of 36 baits per ha on two 55 ha forest aerial test sites (Figure 9). The HMU aerial test site was enclosed by a snake barrier fence to prevent snake immigration into the HMU. The MSA aerial test site and the 55 ha Reference Site do not have barrier fences and both were subject to snake immigration and emigration. The 55 ha forest Reference Site had the same monitoring procedures as the two aerial test sites, except no treated baits were deployed. Decreased snake populations were monitored by bait take of radiotelemetered acetaminophen-treated DNM that were dropped on each of the two aerial sites and bait take of untreated DNM from bait stations located in transects in each of the two aerial sites. Snake activity on the Reference Site was monitored only by bait take of untreated DNM from bait stations located on transects.

5.2 BASELINE CHARACTERIZATION AND PREPARATION

A great amount of resources have been expended in getting the study sites ready for the field test. Using geographic information system global positioning systems (GIS/GPS), each of the two 55 ha aerial test sites and the 55 ha Reference Site have been divided into six blocks of nine transects each (54 transects per site x 3 sites = 162 transects). Each transect has been marked for alternate placement of 11 bait stations at 20 m intervals and 11 rodent live traps at 20 m intervals (54 transects per site x 11 bait station or traps per transect site = 594 possible locations per type). Calculating the total marks for the three sites equals 1,782 possible bait station or rodent live trap locations. Trials to assess BTS breaching the fence into the HMU were not conducted because personnel with fence barrier experience have concluded that the fence meets barrier standards (Perry et al 1998).

5.3 DESIGN AND LAYOUT OF TECHNOLOGY AND METHODOLOGY COMPONENTS

The technology components were: 80 mg acetaminophen tablets (EPA Registration Number 56228-34 - formulated at the NWRC, Fort Collins, CO), dead neonatal mice (Noble Supply and Logistics Rockland, MA), paper streamers (4 ft. long paper flag streamers with cardboard on each end of the paper streamers- R/S Sales, Lewiston, ID), radio transmitters (Model 1520, ATS, Isanti, MN), helicopter (Bolkow Bo105), bait stations (5.1 cm diameter x 30.5 cm long polyvinyl chloride tube with a 0.64 cm diameter bolt bisecting each tube 2.5 cm from each end), and rodent live trap (Model 201, Tomahawk® Live Trap, Tomahawk, WI). Use of trade names does not imply government endorsement.

The 80 mg acetaminophen tablets were formulated at the NWRC as described in Standard Operating Procedure (SOP) Laboratory Procedure (LP) SOP LP 004.00 and shipped to Guam. DNM were shipped frozen to Guam and maintained frozen until treated with tablets. A tablet was inserted into the body cavity of a thawed DNM through the mouth using forceps. The rear legs and nose of a DNM were glued to the small cardboard on a paper streamer (flag-bait) and flag-baits were re-frozen before being deployed in the field. Flag-baits were deployed by hand at about 30 m above ground level from a helicopter at 36 per ha (1,980 for each aerial drop on each of two 55 ha aerial test sites).

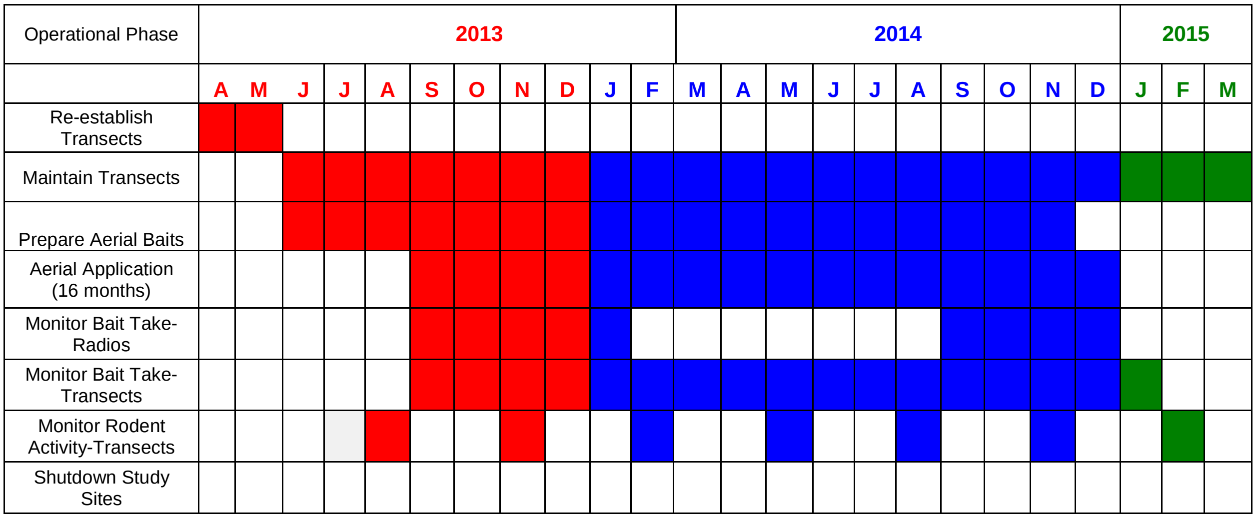
5.4 FIELD TESTING

Significant operational phases of the demonstration are presented in the Operational Phase Gantt Chart (Figure 10). Transects in each of the two 55 ha aerial test sites and the 55 ha Reference Site were completed and had to be continually cleared to allow field personnel access. Transects were maintained throughout the 16 months of aerial application. Each aerial drop required 1,980 DNM each treated with an 80 mg tablet of acetaminophen with rear legs and nose glued to paper streamers (flag-baits). Ten of the DNM had radio transmitters for tracking with radio receivers to record the landing position (canopy or ground landing) immediately after the drop, and DNM disposition (take by snakes or non-targets) for 1-4 days post-drop.

Snake activity was monitored by take of untreated DNM bait from bait stations and rodent activity was monitored by capture of rats in live traps (baited with an approximately 1.5 x 1.5 cm segment of coconut) from six transects in each of the two aerial test sites and the Reference Site daily for two days. Transects were randomly selected (ResearchRandomizer, http://www.randomizer.org/form.htm) from each of the six blocks in the two aerial test sites and Reference Site for pre-aerial monitoring and monitoring one week after each aerial drop. Baits missing were not replaced and rats captured were released at the trap site after being individually weighed. Animals found dead on the test sites were collected (SOP FP 034.00).

The HMU and MSA aerial drop sites have two parameters each for scheduling aerial drops after the initial drop on each site: (1) bait take of radio telemetered DNM, and (2) untreated DNM bait take from stations on transects. Bait take of radioed DNM had to be reduced >80% and take of untreated bait from stations <30% before aerial drops were stopped. Thresholds for both parameters on each drop site have to be met to discontinue aerial drops. For example, if radioed DNM bait take was reduced <80% and take of untreated bait from stations was <30% on the MSA site, and both parameters have been met on the HMU site, an aerial drop would be scheduled only on the MSA site.

Figure 10. Gantt chart for operational phases of the aerial application of acetaminophen-treated baits for control of brown treesnakes.



All physical marks (e.g., plastic flagging and metal markers for transects and marks for bait stations and rodent live traps, as well as the intact bait stations and rodent live traps) were removed at the termination of long term monitoring.

5.5 SAMPLING PROTOCOL

Prior to initiation of the Demonstration Project the NWRC Quality Assurance protocol (QA-1828) was reviewed by the NWRC Quality Assurance Unit (QAU) which is an independent element of the NWRC Director's Office and the research sections of the Center which conduct the studies. The QAU is responsible for monitoring each study to assure that the facilities, equipment, personnel, methods, practices, records, and controls are in conformance with the Code of Federal Regulations (CFR) Title 40, Part 160: Good Laboratory Practice Standards (Federal Insecticide, Fungicide, and Rodenticide Act); Title 40, Part 792: Good Laboratory Practice Standards (TSCA); Title 21, Part 58: Good Laboratory Practice Standards for Nonclinical Laboratory Studies, (Federal Food, Drug, and Cosmetic Act). These duties include appropriate regulated documentation and approval (Institutional Animal Care and Use Committee, Biosafety, National Environmental Policy Act [NEPA], Endangered Species Act [ESA]) as applicable.

All data collection followed the Demonstration Plan protocol (see sections 3.0 and 5.0) and NWRC QA-1828. In addition data collection followed NWRC SOP AD011.02 Data Recording and Error Correction. Field data sheets identifying NWRC QA-1828 were developed for specific field data collection activities (e.g. bait station monitoring, rodent trapping). Details on calibration, quality assurance, methods, and number and type of samples collected are provided in the following sections including referenced figures and appendices.

5.5.1 Calibration of Equipment

Calibration of equipment was conducted by project staff. However, there were activities that can be considered in this category. Prior to the bait drops a flight was made along Route 3A which runs parallel to the HMU and MSA aerial transect drop paths on the northwest side of the HMU. The edge of the road was marked at 20 m intervals with white paint and bait deployment frequency was estimated by simulating the drop procedure at 20 m intervals as the flight pass was made. This procedure allowed air crew staff to estimate drop cadence under ambient conditions. Aerial bait drop transects plotted by the onboard Trimble® GPS unit were subsequently plotted in Environmental Systems Research Institute (ESRI) ArcMAP v10, post drop to evaluate actual aerial transect placement on drop sites.

5.5.2 Quality Assurance Sampling

Prior to aerial bait drops a subsample of acetaminophen tablets were sent to the NRWC chemistry Unit labs in Ft. Collins CO, for assay of quality and amount of active ingredient. This procedure followed NWRC Analytical Method 96B -Determination of Acetaminophen in Tablets.

Brown tree snake and non-target animal carcasses were shipped to the NWRC chemistry labs along with control samples collected offsite through normal WS operational programs. All samples were single blind evaluated by the chemistry lab staff to ensure accuracy of findings. Standard operating procedures for analyses followed NWRC Analytical Method 106A - Determination of Acetaminophen Residues in Brown Treesnake Carcasses.

Field data recording and entry were checked for accuracy by third party review, typically a support staff member, onsite supervisor, or the principal investigator. Rodent trapping and rodent trap modifications were evaluated by offsite trapping and comparison of the modified traps used in this study to standard Tomahawk® traps. This comparison was conducted to ensure that the modified rodent traps were performing as designed to meet project data collection needs. Control of bias was addressed by having a Reference Site that was monitored by bait station monitoring and rodent trapping using the same procedures as the two aerial drop sites (HMU and MSA), except it was not treated with toxicant baits.

5.5.3 Sample Documentation

Field data were recorded onsite on hardcopy data sheets at the time of data collection and were scanned and archived at the WS, NWRC Quality Assurance Unit archive in Ft. Collins, CO.

5.6 SAMPLING RESULTS

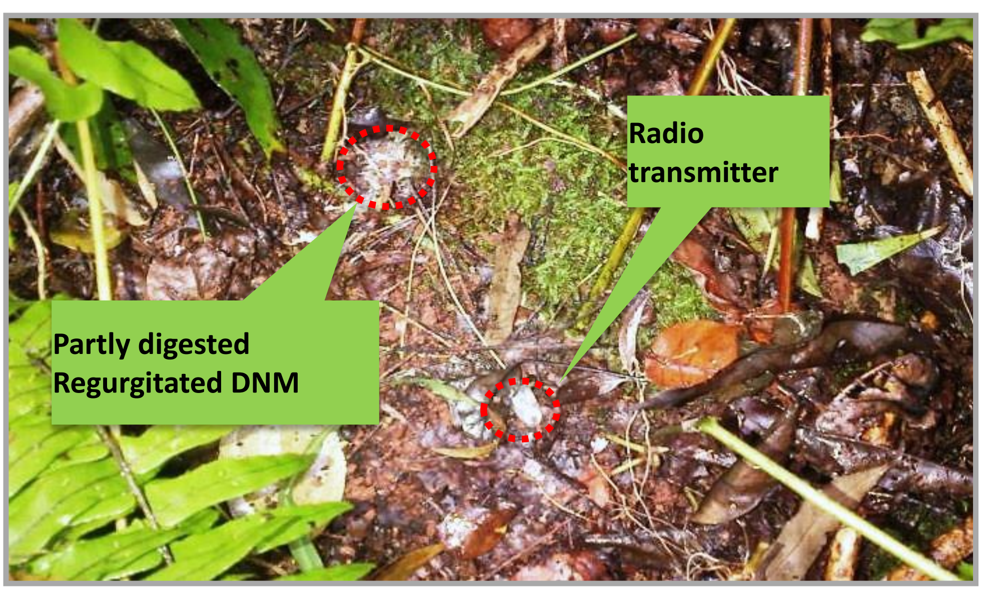
The following provide the quantitative performance objectives results and data summary of very high frequency (VHF) radio telemetry data collected for the following performance metrics:

1) Maximize landing of telemetered baits above ground level
2) HMU test site: Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS
3) MSA test site: Reduce BTS abundance as measured by reduced telemetered treated DNM bait take by BTS
7) Minimize non-target impacts (crabs, monitor lizards)
8) Maximize aircrew performance for delivering telemetered baits at regular intervals.

A total of 110 telemetered baits were dropped over 11 applications. Of these it was possible to make a determination of canopy or ground landing, distance between baits, and bait take rates on each site for 105 telemetered baits that were recovered in the field (95% recovery rate). One radio was never relocated, one was not deployed (it fell into the interior of the helicopter) and three were not categorized due to delays in recovery due to weather (Data in Appendix B). The radio transmitter's batteries began to fail rapidly after 14 months and further data could not be collected.

While metrics for quantitative performance objectives one and eight for telemetered baits worked well, achieving metrics quantitative performance objectives two and three presented challenges in field application. The issue was that snakes were taking the baits but a large number appeared to regurgitate the VHF transmitter, prior to mortality. So, while 95% of VHF transmitters were recovered, determination of fate and take rate was difficult as transmitters were not found in snakes. In order to address the presumed regurgitation of transmitters only baits identified in the canopy immediately post drop and later recovered on or near the ground and "clean" (i.e. not attached to a mouse) were used in analyses as an indicator of take rate. In some cases the radio was found near the carcass of a snake or regurgitated parts of a mouse (Figure 11).

Figure 11. Image of a regurgitated mouse and VHF transmitter found during transmitter recovery efforts on the MSA drop site, Andersen Air Force Base, Guam, 4 September 2013.



Due to the lack of VHF telemetry based bait fate data, carcasses of dead snakes found on each drop site were opportunistically collected (HMU n=6, MSA n=6) during bait-station monitoring and site maintenance. An additional eight snakes collected from outside the bait drop areas were sent (single blind) to the USDA/WS/NWRC lab in Ft. Collins Colorado for acetaminophen residue analyses. Standard operating procedures for analyses followed NWRC Analytical Method 106A - Determination of Acetaminophen Residues in Brown Treesnake Carcasses.

The following provide the quantitative performance objectives results and data summary of bait drop and bait station data collected for the following performance metrics:

> 4) HMU test site: Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments
>
> 5) MSA (no snake fence barrier aerial test site): Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments

Figure 12 provides a schematic example of aerial bait drop, bait station and rodent trapping methods on the HMU site. The MSA and reference site followed similar procedures except the reference site had no aerial bait drops. The blue boundary line represents the snake barrier fence. The parallel lines running the length of the site represent the aerial toxicant bait drop transects. Toxicant baits were dropped approximately every 20 m. The red dots represent the randomly selected aerial transect segment on which VHF marked baits were dropped. The white lines perpendicular to the aerial transects represent the 210 m long bait station monitoring transects or rodent monitoring transects randomly selected for each monitoring period. Each transect had 11 bait stations or rodent traps placed at 20 m intervals.

Figure 12. Schematic example of aerial bait drop, bait station and rodent trapping methods on the HMU site.

A total of 29,700 80 mg acetaminophen tablets inserted in DNM and attached to a flagger were aerially deployed on the 55 ha HMU and MSA bait drop sites during 15 applications between 11 September 2013 and December 19, 2014 (Table 2).

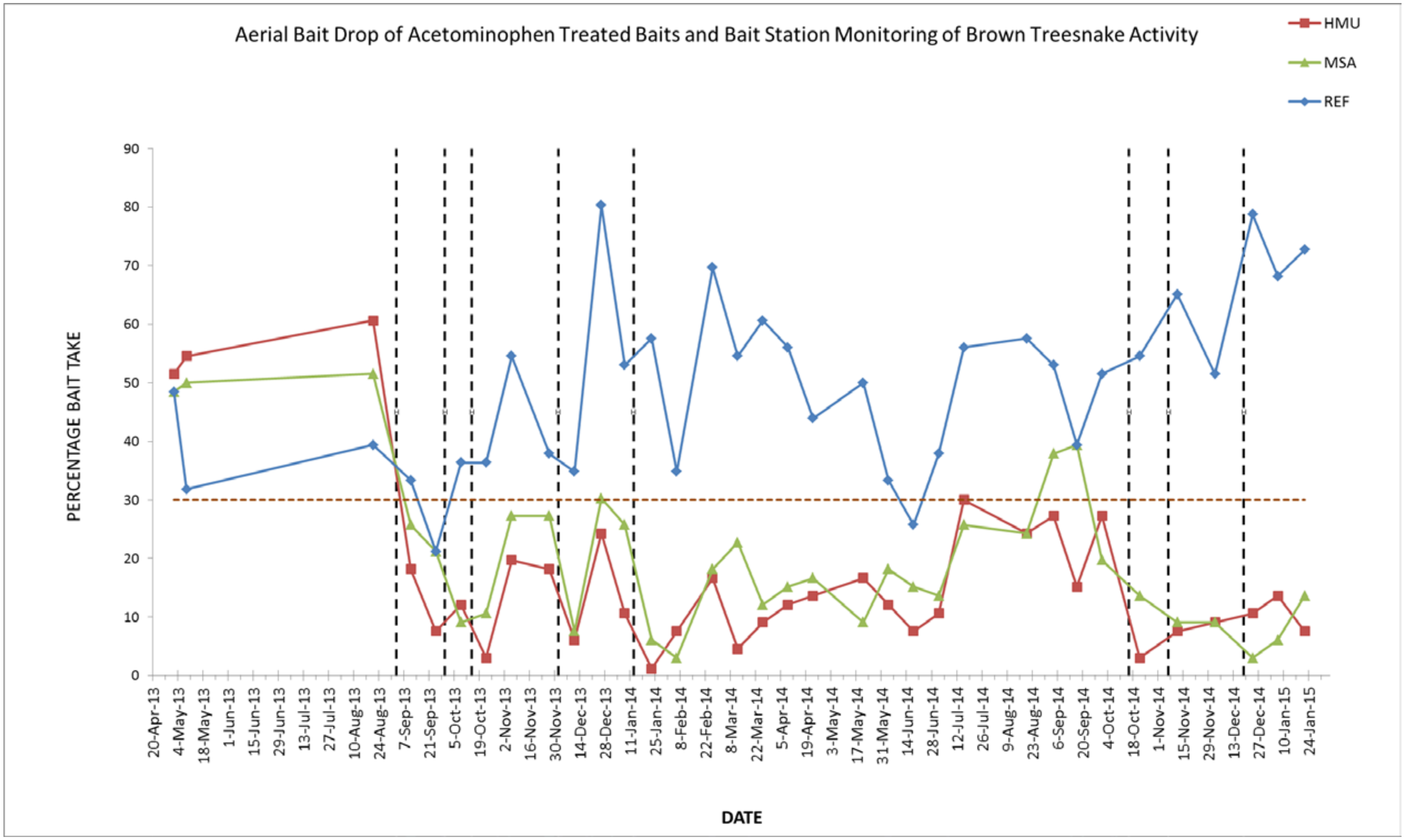
Table 2. Drop date, consecutive bait drop number on each drop site and number of 80 mg acetaminophen tablets deployed during each drop on the HMU and MSA drop sites. Andersen Air Force Base, Guam, 3 September 2013 to 19 December 2014.

HMU			MSA		
Drop Date	Drop Number	80 mg Acetaminophen Tablets Deployed	Drop Date	Drop Number	80 mg Acetaminophen Tablets Deployed
3-Sep-13	1	1,980	4-Sep-13	1	1,980
30-Sep-13	2	1,980	1-Oct-13	2	1,980
15-Oct-13	3	1,980	16-Oct-13	3[a]	0
2-Dec-13	4	1,980	3-Dec-13	4	1,980
13-Jan-14	5	1,980	14-Jan-14	5	1,980
15-Oct-14	6	1,980	16-Oct-14	6	1,980
6-Nov-14	7	1,980	7-Nov-14	7	1,980
19-Dec-14	8	1,980	19-Dec-14	8	1,980
Total		15,840	Total		13,860

[a]Drop on HMU only, severe weather prevented drop on MSA site

A total of 6,732 bait stations were baited and checked providing 612 individual transect level measures of bait take rate over 34 monitoring sessions from 2 May 2013 to 22 January 2015 (Figure 13; Data in Appendix C).

Figure 13. Bait take rate from bait stations on randomly selected transects on the Reference site (REF, blue solid line, Naval Station, Guam), HMU drop site (solid red line, Andersen Airforce Base, Guam) and MSA (solid green line, Andersen Airforce Base, Guam) 2 May 2013 through 22 January 2015. Vertical black dashed lines represent bait drop dates on the HMU and MSA. The red horizontal dashed line was the 30% reference level below which bait take rates should be maintained for each drop site.



The following provide the quantitative performance objective results and data summary for rodent trapping data collected for the following performance metric:

6) Minimize compensatory increases in non-native rodent abundance.

A total of five rats (likely Rattus diardii: Species status on Guam is in question (Wiewel et al. 2009). Hereafter all rats are referred to as Rattus spp.) were captured in 2,772 total trap nights of sampling on all three locations. All five roof rats were captured on the HMU location, one on 13, August 2013 prior to bait drops, one on 12 August 2014, and 3 on 25 and 26 November 2014.

Modified trap test performance data: A total of 12 rats (Rattus spp.) were caught in 420 trap nights of effort (210 per trap type). The average CPUE was 3.8 rodents/100 trap nights and 1.9 rodents per 100 trap nights for the modified and standard traps respectively.

The following provides the qualitative performance objective data summary for maximizing crew performance for the following performance metric:

1) Maximize aircrew work performance during aerial bait deployment**.**

The aircrew's success in this qualitative metric was measured by the successful completion of demonstration project activities. Crews maintained production levels and enthusiasm for all aspects and phases of the demonstration project evidenced by: 1) study site establishment of 162, 210 m transects (34 km total), placement of 1,782 bait stations on transects, 2) preparation of 29,700 flagger baits, 3) radio tracking and recovery of 105 VHF marked baits, 4) 15 total aerial bait drops of 1,980 baits each (29,700 total), 5) twice monthly baiting and monitoring of 198 randomly selected bait stations over 34 sessions (6,732 bait stations total), and 6) 2,772 total trap nights of rodent sampling on all three locations.

6.0 PERFORMANCE ASSESSMENT

Quantitative Performance Objectives

1) Maximize landing of telemetered baits above ground level

DNM acetaminophen-treated baits were attached to paper streamers with cardboard on each end that entangle the bait in the jungle above ground level to mitigate bait take by non-target animals such as crabs and monitor lizards. Twenty (20) radio telemetered DNM (10 each on the HMU and MSA) sites were deployed on each aerial drop on randomly selected 90 m transects. Immediately after the drop, DNM were tracked by radio and location (above ground level or ground landing) were recorded. Criterion for success was that >80 % of the baits were above ground level. Analysis of data: Descriptive statistics (mean, SE, range) for percentage of telemetered baits above ground level across all drops. A two sample t-test of differences ($P< 0.05$) in means (H_0 mean difference = 0) between sites was used to evaluate site specific differences in canopy landing.

Results:

Of the 105 recovered baits, 86 were found in the canopy providing an 82% canopy landing of baits over all sites and all drops (min=50%, max=100%). Canopy landing of baits was marginally greater in the HMU than the MSA (mean = 85% and mean = 79%, respectively). This was largely driven by a low landing rate of 50% in drop two for the MSA. The median canopy landing rate for the HMU and MSA was 85% and 88% respectively. A F-test of canopy landing data indicated equal group variances ($F_{5,4} = 0.58$, $P=0.19$). A two sample t-test assuming equal variances indicated no significant difference ($t_9 = 0.60$, $p=0.54$) between sites. The mean height in the canopy of baits was 11.2 m (N=105, SD=6.13m).

Summary Conclusions Canopy Landing of Baits:

The success criterion for > 80% landing of baits in the canopy was met. The use of VHF transmitters placed in the body cavity of DNM baits worked well for tracking bait landing locations and evaluating success metrics. Major factors in bait landing success were the presence of wind and rain, during and immediately post drops. Wind not only affected drift of the flaggers and baits it also made it more difficult for the pilot to stay on transects. Avoiding applications when winds might exceed 15 kilometers per hour would improve performance. Conducting bait drops during rain events were avoided for the most part, however, on at least one occasion rain occurred within 48 h post drop (drop four). The rain caused the flaggers to disintegrate causing some baits to fall to the ground.

2) HMU (snake fence barrier aerial test site): Reduce BTS abundance as measured by reduced treated telemetered DNM bait take by BTS.

Radio telemetered DNM were tracked for 1-4 days after each aerial deployment and bait take by BTS and non-target animals recorded. As snake numbers decline after each treated bait drop, there would be a corresponding decrease in the percentage of radio telemetered treated DNM consumed by snakes. For example, if bait take was 70% after the first drop and 10% after the

fourth drop, the reduction in bait take would be 85.7% (70% - 10% = 60%; 60%/70% = 85.7%). The criterion for success was that no more than four aerial drops would be needed for reducing treated bait take by >80%.

Analysis of data:

Descriptive statistics for calculated percentage change (reduction) in treated bait take from initial drop for each monitoring period.

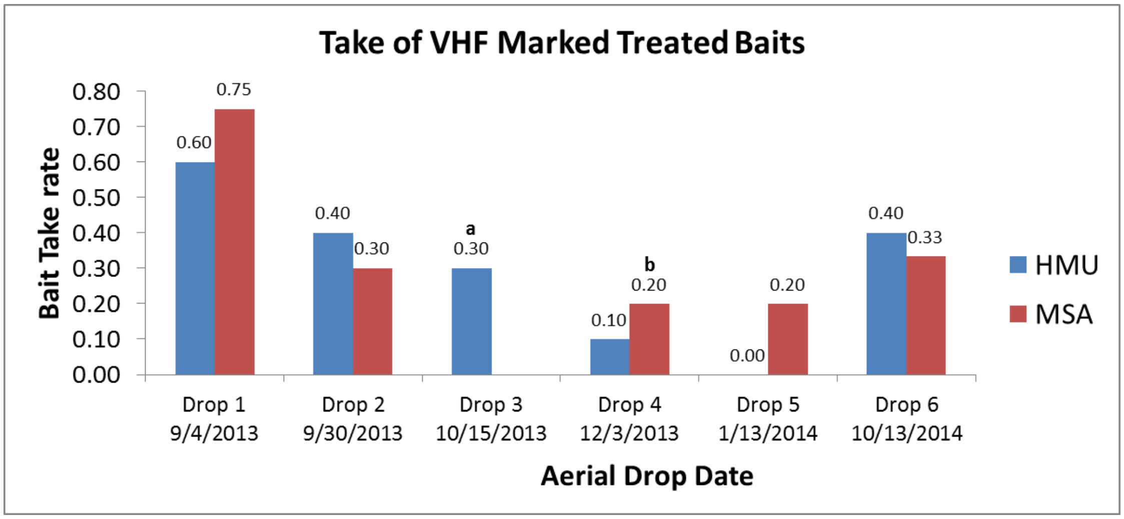
HMU:

In order to address the presumed regurgitation of transmitters for analyses only baits identified in the canopy immediately post drop and later recovered on or near the ground and “clean” (i.e. not attached to a mouse) were used in analyses as an indicator of take rate. In some cases the radio was found near the carcass of a snake or regurgitated parts of a mouse (Figure 11).

While the above does reflect an indirect measure of take and can track trends in take rate, this measure may artificially inflate bait take rate. The reason for this was if a bait, located in the canopy were later to fall to the ground prior to take by a BTS, the mouse may have been consumed by scavengers on the ground (e.g. terrestrial crabs), which typically leave the VHF transmitter behind. Under this scenario this would be counted as a “take” and this may artificially inflate bait take rate. The aforementioned issues were discussed in the Fall 2013 In Progress Review (IPR) and addressed in the subsequent white paper (Appendix D). The following represent results of VHF bait take monitoring given the above methods and caveats.

For bait drops 1-5 on the HMU site there was a decline in bait take rate of VHF marked treated baits. Bait take rate on the HMU site declined from 60% to 10% by bait drop four (Figure 14). There was an 83% decline in bait take rate of treated VHF marked baits on the HMU, thus reaching the success metric of an 80% decline within four drops (Table 3). When bait drops resumed almost 10 months later bait take rates on the MSA had increased to levels similar to those recorded during the 2nd bait drop but did not increase to initial bait take levels suggesting a potential long term reduction in bait take rate and consequently snake numbers on the HMU site. Fate of baits could not be determined as no baits were found in snakes within the HMU due to regurgitation of baits.

Figure 14. Bait take rate of VHF telemetered treated baits dropped on random transects on the HMU and MSA drop sites, Andersen Air Force Base, Guam, 4 September 2013 – 13 October 2014 (N=110).



[a]Drop on HMU only, severe weather prevented drop on MSA site
[b]Heavy rains >24 hours post-drop caused some flaggers on the HMU to fall to the ground possibly affecting snakes bait take rates.

Table 3. Reduction in bait take rate relative to bait take rate at the first aerial bait drop on the HMU and MSA drop sites, Andersen Air Force Base, Guam, 4 September 2013 – 13 October 2014. Bait take rate determined from 10 VHF marked toxicant baits (N=110 total) aerially dropped on randomly selected transects on each drop site for each bait drop date.

Aerial Drop Site	Drop 1 9/4/2013	Drop 2 9/30/2013	Drop 3 10/15/2013	Drop 4 12/3/2013	Drop 5 1/13/2014	Drop 6 10/13/2014
	N=10 per site	N=10 per site	N=10	N=10 per site	N=10 per site	N=10 per site
HMU Bait Take Rate	0.60	0.33	0.50	0.83	1.00	0.33
MSA Bait Take Rate	0.75	0.60	a	0.73	0.73	0.56

[a]Drop on HMU only, severe weather prevented drop on MSA site

3) MSA (no snake fence barrier aerial test site): Reduce BTS abundance as measured by reduced treated telemetered DNM bait take by BTS

Data acquisition needs were similar to 2) above. The criterion for success was that no more than five aerial drops would be needed for reducing bait take by >80%. Analysis of data: Descriptive statistics for calculated percentage change (reduction) in treated bait take from initial drop.

MSA:

For bait drops on the MSA there was a decline in bait take rate of VHF marked treated baits after the first five drops (Figure 14). Bait take rate on the MSA site declined from 75% to 20% by bait drop five (Figure 14). There was a 73% decline in bait take rate of treated VHF marked baits on the MSA (Table 3). However, on the MSA site it was not possible to meet the success metric of an 80% decline. The maximum decrease in bait take rate on the MSA by bait drop five was 73% (Table 3). It should be noted that severe weather prevented bait drops on the MSA during the 3rd drop period. So the MSA only had four bait applications over this time period total. When bait drops resumed almost 10 months later bait take rates on the MSA had increased to levels similar to those recorded during the 2nd bait drop but did not increase to initial levels suggesting a potential long term reduction in bait take rate and consequently snake numbers on the MSA site. Fate of baits taken could not be determined as only one transmitter was found in a snake due to regurgitation of baits.

Summary Conclusions MSA and HMU VHF Marked Treated Baits:

As was noted in the Fall 2013 In-Progress-Review and subsequent white paper (see Appendix D) the measures of VHF marked treated baits as described may artificially inflate bait take rate. The reason for this was if a bait falls to the ground prior to take by a BTS, the mouse may have been consumed by scavengers on the ground (e.g. terrestrial crabs, rodents), which typically leave the VHF transmitter behind. Under this scenario this would be counted as a “take” and this may artificially inflate bait take rate. If this scavenging was constant over the course of the demonstration project then it would have little effect on outcomes and conclusions. However, if this scavenging of baits varied systematically over time, for example increasing due to increased rodent or terrestrial crab populations, it would affect results and conclusions. In this scenario estimates of bait take by snakes would be inflated and therefore estimates of reductions in snake numbers would be underestimated. Given the relatively short time frame for the first five drop periods (3 months), either no change in scavenger numbers or increases over time is the most likely scenario associated with reductions in snake numbers.

Given the above, bait take rate of VHF telemetered baits clearly did decline on both the HMU and MSA sites. The success metric of a >80% reduction in bait take rate within four drops on the HMU was achieved. Although the MSA did not reach the target level of an 80% reduction in bait take rate over five drops, extenuating factors of one drop being cancelled due to severe weather and the possibility of overestimation in bait takes rate may have negatively affected results. The data for the MSA site clearly indicated a decline in snake numbers and reached a 73% reduction in four applications which can be described as marginally successful.

Regurgitation of telemetered baits prevented determination of fate of baits as initially planned. Only one VHF marker was found in a snake carcass on the MSA site of the 110 telemetered baits dropped over 11 bait applications on both sites. One regurgitated bait was found about 2 m from a dead snake, also on the MSA site. Due to this lack of fate data, carcasses of dead snakes found on each drop site (n=6) during bait-station monitoring and site maintenance were opportunistically collected. These snakes plus an additional eight snakes collected from outside the bait drop areas were sent (single blind) to the USDA/WS/NWRC lab in Ft. Collins Colorado for acetaminophen residue analyses. For snakes recovered within drop sites, 83% (N=6) tested

positive for residual acetaminophen. No snakes (N=8) recovered outside of the drop sites were positive for residual acetaminophen. Although sample sizes were small, these results suggest that snakes dying within drop sites were doing so largely due to consumption of acetaminophen treated baits.

4) HMU (snake fence barrier aerial test site): Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments

BTS abundance would be reduced by aerial application of treated DNM baits and snake activity was monitored by the number of untreated DNM taken by BTS from bait station on transects in the HMU. Untreated bait take was expressed as percentage of baits taken. Bait take was recorded pre-aerial drop and after one week for each treated bait aerial drop. Aerial drops and recording of bait take were continued until untreated bait take was < 30%. Aerial drops were initiated again when the bait take was > 30% for two consecutive weeks. The criterion for success was that there would be at least 12 weeks between aerial drops for maintaining bait take < 30%. Analysis of data: The observations that were analyzed from each transect (one per each of the six sampling blocks for each of the two aerial drop sites and the reference site) were the proportion of baits taken from the bait stations. Data were tested using a general linear model (Hocking 1985, SAS Institute 2011) two-factor factorial analysis of variance, where main effects were treatment location (REF, HMU, MSA) and time (sampling occasion). Treatments were also compared for bait drop periods and sampling occasions as determined by success metrics using *a priori* contrasts on the treatment x time interaction means (Hayter 1989). Data were analyzed using least squares means and Tukey-Kramer adjustment for P-values for multiple comparisons (SAS Insititute 2011).

Amendments to the Performance Assessment:

The original Demonstration Plan indicated that bait station monitoring of brown treesnake (BTS) activity would occur following each bait drop. The plan also implies that some level of interim monitoring would occur but did not specify a frequency for monitoring. The monitoring of bait stations for BTS activity was done every two weeks for the field test portion of the demonstration project. This level of monitoring provided a more rigorous evaluation of post drop effects and response over time to toxicant bait drops relative to only monitoring immediately post drop. In addition, monitoring every two weeks provided timely evaluation of the need for further toxicant drops and was logistically feasible for the present project staff level.

The originally planned unadulterated bait station performance metric of a <30% bait take rate was not considered sufficient. At some points in the initial phases of the demonstration the reference site dropped below a 30% bait take rate. Given this the bait take success rate on the drop sites and the reference site were less than the success metric and therefore a difference from the reference site may not be apparent in some cases. This would hamper evaluation of effectiveness of the method.

Due to the above multiple measures of bait take rate were recommend. One success measure was similar to that proposed for the VHF marked baits. In this case an average > 80% reduction from initial bait takes rates for a given time period. For example, if bait take was 70% after the first drop and 10% after the fourth drop, the reduction in bait take would be 85.7% (70% - 10% = 60%; 60%/70% = 85.7%). In addition, drops were considered successful if overall bait take rates

was significantly less ($p<0.05$) on the HMU and MSA as compared to the reference site. This measure allowed the use of the study design and spatial and temporal control to evaluate project success. This method also allowed an evaluation of significant detectable effect sizes (e.g. <30% absolute difference between sites that were detectable at a given alpha) regarding differences between drop sites and the reference site. These changes were applied to both drop sites and were approved in ESTCP-IPR and the subsequent white paper (Appendix D).

Analyses Results:

The general linear model for pre- and post-drop bait takes rate was significant ($F_{17, 396} = 27.34$, $P < 0.001$). Main effects drop period, location and the drop period by location interaction were significant ($F_{5, 396}= 23.10$, $P< 0.001$, $F_{2, 396}= 120.00$, $P < 0.001$, and $F_{10, 396}= 10.93$, $P < 0.001$, respectively). The Tukey-Kramer adjustment for means comparisons was performed on all pairwise differences in means for all locations pre-drop and post-drop for bait drops 1-5. All bait drop sites were significantly different than the reference site during drop periods 2-5 (Table 4).

Means comparisons indicated that the bait take rate within the HMU declined significantly with respect to pre-drop take of unadulterated mouse baits from bait stations after single aerial toxicant bait drop (Figure 15). The HMU drop site was significantly less than the reference site for drop periods 1-5 (Table 3). Both drop sites were not significantly different from each other for drop periods 1-5. The HMU had a significantly greater bait take rate than the reference site pre-drop (Figure 16).

Figure 15. Bait take rate (%) within drop sites and reference site pre- and post-drop after a single toxicant bait application. Vertical bars represent standard deviations. Asterisks (***) represent significant differences using Tukey-Kramer post-hoc comparisons at $\alpha = 0.05$. NS indicates no significant difference. Minimum detectable effect size for changes in bait take rate for the HMU, MSA, and Reference (REF) site were, 12.2%, 10.3% and 12.6% respectively.

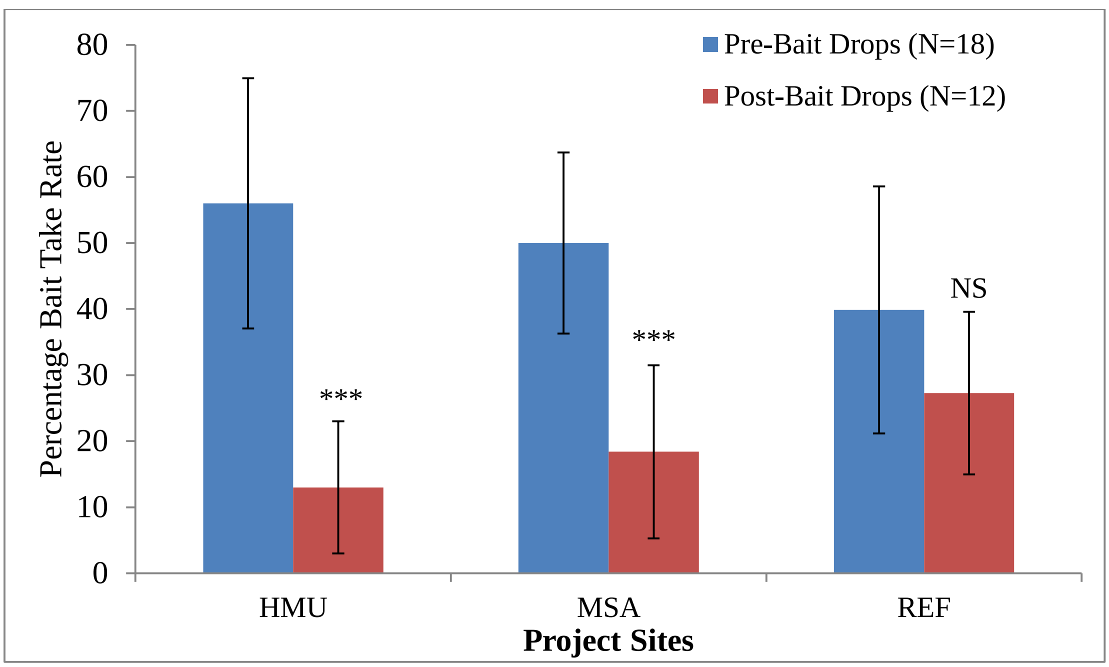


Figure 16. Comparison of pre-and post-drop bait take rates after a single bait application between drop sites and reference site (May 02, 2013-September 23, 2013). Letters represent significant differences between locations pre- and post-drop using the Tukey-Kramer post-hoc means comparison and α =0.05. Locations with the same letter were not significantly different.

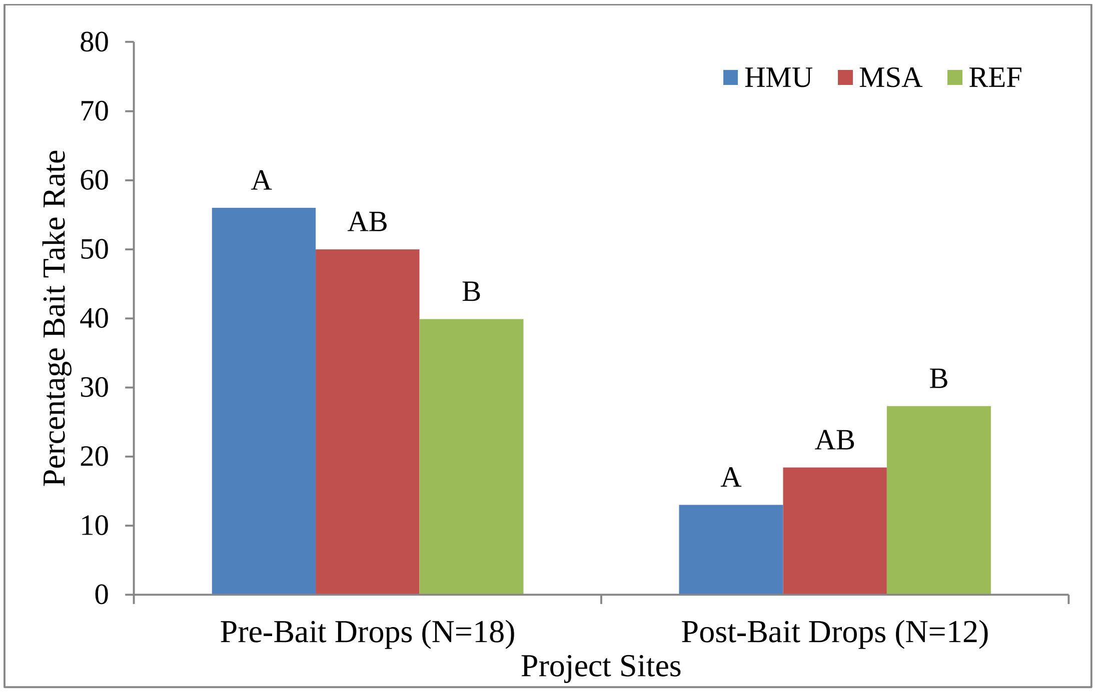


Table 4. Comparisons for all pairwise differences between bait take rate means for pre-drop and all bait drop periods and locations for bait drops 1-5 for aerially applied acetaminophen treated baits to control brown tree snakes. The upper cell for each comparison is t for H_0: LSMean(i)=LSMean(j). The lower cell in each comparison is the Pr > |t|.

		MSA	REF	HMU	MSA	REF	HMU	MSA	REF	HMU	MSA	REF	HMU	MSA	REF	HMU	MSA	REF
	i/j	**Pre-drop**	**Pre-drop**	**Drop 1**	**Drop 1**	**Drop 1**	**Drop 2**	**Drop 2**	**Drop 2**	**Drop 3**	**Drop 3**	**Drop 3**	**Drop 4**	**Drop 4**	**Drop 4**	**Drop 5**	**Drop 5**	**Drop 5**
HMU	**Pre-drop**	1.04	2.93	7.15	5.37	4.74	5.75	6.16	2.54	7.85	6.34	2.37	7.85	6.43	-0.09	10.65	9.84	1.85
		1.00	0.24	<.01	<.01	0.00	<.01	<.01	0.50	<.01	<.01	0.63	<.01	<.01	1.00	<.01	<.01	0.93
MSA	**Pre-drop**		1.89	6.22	4.44	3.81	5.02	5.42	1.81	6.81	5.30	1.32	6.81	5.39	-1.14	9.35	8.54	0.55
			0.91	<.01	0.00	0.02	0.00	<.01	0.94	<.01	<.01	1.00	<.01	<.01	1.00	<.01	<.01	1.00
REF	**Pre-drop**			4.53	2.75	2.12	3.68	4.08	0.47	4.92	3.41	-0.57	4.92	3.50	-3.03	6.98	6.17	-1.82
				<0.01	0.35	0.81	0.03	0.01	1.00	0.00	0.07	1.00	0.00	0.05	0.19	<.01	<.01	0.94
HMU	**Drop 1**				-1.62	-2.20	0.09	0.47	-2.93	-0.13	-1.48	-5.04	-0.13	-1.40	-7.24	0.53	-0.15	-6.92
					0.98	0.75	1.00	1.00	0.24	1.00	0.99	0.00	1.00	1.00	<.01	1.00	1.00	<.01
MSA	**Drop 1**					-0.58	1.42	1.80	-1.61	1.65	0.30	-3.26	1.65	0.38	-5.46	2.64	1.96	-4.81
						1.00	0.99	0.94	0.98	0.97	1.00	0.11	0.97	1.00	<.01	0.42	0.89	0.00
REF	**Drop 1**						1.89	2.27	-1.14	2.28	0.93	-2.62	2.28	1.02	-4.82	3.40	2.71	-4.06
							0.91	0.70	1.00	0.69	1.00	0.44	0.69	1.00	0.00	0.07	0.37	0.01
HMU	**Drop 2**							0.33	-2.62	-0.20	-1.27	-4.08	-0.20	-1.20	-5.82	0.28	-0.22	-5.20
								1.00	0.44	1.00	1.00	0.01	1.00	1.00	<.01	1.00	1.00	<.01
MSA	**Drop 2**								-2.95	-0.60	-1.67	-4.48	-0.60	-1.61	-6.22	-0.16	-0.67	-5.65
									0.23	1.00	0.97	0.00	1.00	0.98	<.01	1.00	1.00	<.01
REF	**Drop 2**									3.01	1.94	-0.87	3.01	2.01	-2.61	3.83	3.33	-1.65
										0.20	0.89	1.00	0.20	0.86	0.45	0.02	0.09	0.97
HMU	**Drop 3**										-1.51	-5.49	0.00	-1.42	-7.95	0.81	0.00	-7.99
											0.99	<.01	1.00	0.99	<.01	1.00	1.00	<.01
MSA	**Drop 3**											-3.97	1.51	0.09	-6.43	2.71	1.90	-6.09
												0.01	0.99	1.00	<.01	0.38	0.91	<.01
REF	**Drop 3**												5.49	4.07	-2.46	7.69	6.88	-1.11
													<.01	0.01	0.56	<.01	<.01	1.00
HMU	**Drop 4**													-1.42	-7.95	0.81	0.00	-7.99
														0.99	<.01	1.00	1.00	<.01
MSA	**Drop 4**														-6.53	2.59	1.78	-6.21
															<.01	0.47	0.95	<.01
REF	**Drop 4**															10.77	9.96	1.97
																<.01	<.01	0.88
HMU	**Drop 5**																-1.24	-13.44
																	1.00	<.01
MSA	**Drop 5**																	-12.20
																		<.01

There was no significant increase in bait take rate within the HMU between bait drop five (monitoring session 13, 23-January-2014) until monitoring session 24 (16-July-2014; Appendix E); a period of 160 days without a significant detectable increase in bait takes rate on the HMU (Figure 13). During this period the HMU averaged a bait take rate of 10.2% (N=66, SD=4.8%, min=0, max=36.4%) corresponding to an average 81.7% (N=66, SD= 8.7%) reduction in bait take rate.

Bait take rates increased significantly between monitoring sessions 23 (11%) and 24 (30%) and reached the 30% threshold on the HMU for the first time since 21 August, 2013; a period of 315 days (Figure 13). The general linear model for within the HMU site bait takes rate for session 23 and 24 was significant ($F_{1, 10} = 13.85$, $P = 0.004$) The HMU had a significantly higher bait take rate in session 24 (Δ=19%, minimum detectable difference = 11.8%, at α=0.05 and β=0.80). Based on these factors a decision was made to initiate a second series of bait drops on the HMU.

For the second series of bait drops the pre-drop period was considered the point at which either the HMU or MSA exceeded the 30% threshold or had a significant increase in bait take rates. Given the data the 2nd pre-drop period began on 16 July 2014 (session 24) and continued to 1 October 2014 (session 28). Three consecutive bait drops were conducted from 16 October to 19 December 2014. Bait stations were then monitored until 22 January 2015 (Table 3 and Figure 13).

<u>Analyses Results 2nd Bait Drop Period:</u>
The general linear model for pre- and post-drop bait takes rate was significant ($F_{11, 186} = 36.68$, $P < 0.001$). Main effects drop period, location and the drop period by location interaction were all significant ($F_{3, 186}$= 5.41, P=0.001, $F_{2, 186}$= 143.99, $P < 0.001$, and $F_{6, 186}$= 3.78, $P < 0.001$, respectively).

There was not a significant drop in bait take rate pre- and post-bait drops 6-8 within the HMU although there were marginal reductions ($P < 0.10$ Table 5). However, the HMU drop site was significantly less than the reference site pre-drop and for drop periods 6-8 (Table 5). The HMU was not significantly different from the MSA pre-bait drop or for bait drop periods 6-8 (Table 5).

There was no significant increase in bait take rate within the HMU site post bait drop 8; a period of 29 days without a significant detectable increase (Figure 13). During this period the HMU averaged a bait take rate of 8.6% (N=36, SD=8.7%, min=0, max=27.3%) corresponding to an average 84.5% (N=36, SD= 6.4%) reduction in bait take rate.

5) MSA (no snake fence barrier aerial test site); Reduce BTS abundance sufficiently to minimize interval between aerial maintenance deployments

Data acquisition needs were similar to 4) above. The criterion for success was that there would be at least 4 weeks between aerial drops for maintaining bait take < 30%. <u>Analysis of data:</u> The observations analyzed from each transect (one per each of the six sampling blocks for each of the two aerial drop sites and the reference site) were the proportion of baits taken from the bait stations. The analytical structure was a two-factor factorial analysis of variance, where one factor

was treatment and the other was time (sampling occasion). Treatments were compared for each sampling occasion using *a priori* contrasts on the treatment x time interaction means.

Amendments to the Performance Assessment:
Changes described in section 4 HMU (above) were applied to the MSA drop site and were approved in ESTCP-IPR and subsequent white paper (Appendix D).

The general linear model for pre- and post-drop bait takes rate between drop sites and reference site and drop periods 1-5 was significant ($F_{17, 396} = 27.34$, $P < 0.001$). The Tukey-Kramer adjustment for means comparisons was performed on all pairwise differences in means for all locations pre-drop and post-drop for bait drops 1-5. The bait take rate within the MSA declined significantly with respect to pre-drop take of unadulterated mouse baits from bait stations after single aerial toxicant bait drop (Figure 15). Bait Take rate on the MSA was significantly different than the reference site during drop periods 2-5 (Table 4) but not drop period 1 (Figure 16). The bait take rate on the MSA was intermediate between the HMU and reference site pre and post drop, but not significantly different from either after one toxicant bait application. Both drop sites were not significantly different from each other for drop periods 1-5.

There was no significant increase in bait take rate within the MSA site between bait drop five (monitoring session 13, 23-January-2014) until monitoring session 26 (4-Sep-2014; Appendix E); a period of 224 days without a significant detectable increase in bait take rates on the MSA (Figure 13). During this period the MSA averaged a bait take rate of 15.4% (N=78, SD=13.5%, min=0, max=54.5%) corresponding to an average 69.2% (N=78, SD= 13.5%) reduction in bait take rate.

Bait take rates increased significantly between monitoring sessions 23 (14%) and 26 (38%) and reached the 30% threshold on the MSA for the first time since 26 December, 2013; a period of 252 days (Figure 13). The general linear model for within MSA bait take rate for session 23 and 26 was significant ($F_{1, 10} = 14.88$, $P = 0.003$). The MSA had a significantly higher bait take rate in session 26 (Δ=24%, minimum detectable difference = 14.0%, at α=0.05 and β=0.80). Based on these factors a decision was made to initiate a second series of bait drops.

For the second series of bait drops the pre-drop period was considered the point at which either the HMU or MSA exceeded the 30% threshold or had a significant increase in bait take rates. Given the data the 2nd pre-drop period began on 16 July 2014 (session 24) and continued to 1 October 2014 (session 28). Three consecutive bait drops were conducted from 16 October to 19 December 2014. Bait stations were then monitored until 22 January 2015 (Table 3 and Figure 13).

Analyses Results 2nd Bait Drop Period:
The general linear model for pre- and post-drop bait takes rate was significant ($F_{11, 186} = 36.68$, $P < 0.001$). Main effects drop period, location and the drop period by location interaction were all significant ($F_{3, 186}= 5.41$, P=0.001, $F_{2, 186}= 143.99$, $P < 0.001$, and $F_{6, 186}= 3.78$, $P < 0.001$, respectively).

There was a significant drop in bait take rate pre- and post-bait drops within the MSA for bait drops periods seven and eight (Table 5). The MSA drop site was significantly less than the reference site pre-drop and for drop periods 6-8 (Table 5). The MSA was not significantly different from the HMU pre-bait drop or for bait drop periods 6-8 (Table 5).

There was no significant increase in bait take rate within the MSA site post bait drop eight; a period of 29 days without a significant detectable increase in bait take rates on the MSA (Figure 13). During this period the MSA averaged a bait take rate of 9.1% (N=36, SD=10.0%, min=0, max=36.4%) corresponding to an average 81.8% (N=36, SD= 8.4%) reduction in bait take rate from pre-drop rates.

<u>Summary Conclusions for Bait Station Monitoring on All Sites:</u>

Bait take rate of unadulterated baits placed in bait stations indicated significant and sustained reductions in bait take rates after aerial application of acetaminophen treated DNM. There were significant drops in bait take rates after a single application of 1,980 baits within both the HMU and MSA drop sites and between both drop sites and the reference site (Figures 12 &13). These reduced bait take rates were sustained for over 160 days on the HMU site with an average reduction in bait take rate of 81.7%. The bait take rate on the HMU site did not exceed a 30% bait take rate after the first bait drop for a period of 315 days. These metrics easily surpassed the original success metrics of maintaining bait take rate below 30% on the HMU for 84 days (12 weeks) post drop, although five drops were made on the HMU site to achieve this result.

During all drop periods both the HMU and MSA had significant reductions in bait take rate relative to the reference site and relative to within site pre-drop bait take rates. The MSA site exceeded the 80% reduction threshold in bait take rates for 34 days post drops. There was no significant increase in bait take rate within the MSA site for a period of 224 days with an average reduction in bait take rate of 69.2% over this time period. In addition bait take rates did not increase above the 30% threshold on the MSA for a period of 252 days easily exceeding the original success metric of at least 28 days below a 30% bait take rate. It should be noted that this was achieved after only four bait drops as the 3rd bait drop was cancelled due to severe weather.

As was seen with telemetered baits, bait take rate from unadulterated baits in bait stations clearly did decline on both the HMU and MSA sites. The success metric of a >80% reduction in bait take rate on the HMU was achieved and this average reduction was sustained for over five months. The MSA reached the target level of an 80% reduction in bait take rate and did so in four aerial bait drops and was sustained for more than 4 weeks. Longer-term reductions in bait take rate were on average less than the HMU but not significantly so. In addition there was not a significant increase in bait take rate on the MSA for over 7 months and the bait take rate did not exceed 30% for over 8 months. Bait station monitoring indices of brown tree snake abundance clearly show a significant decrease in snake numbers which corroborates findings from VHF marked baits. Original success metrics of maintaining bait take rates below 30% on both the HMU and MSA for 12 and 4 weeks, respectively were achieved. Long term bait take reductions were also achieved and these were significantly less than the reference site for all drop periods. Original success metrics were met for both sites and more stringent success metrics applied after the Fall 2013 IPR (See Appendix D) were met on the HMU and largely met on the MSA.

Table 5. Comparisons for all pairwise differences between bait take rate means for pre-drop and all bait drop periods and locations for bait drops 6-8 for aerially applied acetaminophen treated baits to control brown tree snakes. The pre-drop period began 16 July 2014 (session 24) and continued to 1 October 2014 (session 28). The upper cell for each comparison is t for H_0: LSMean(i)=LSMean(j). The lower cell in each comparison is the Pr > |t|.

		MSA	REF	HMU	MSA	REF	HMU	MSA	REF	HMU	MSA	REF
	i/j	**Pre-drop**	**Pre-drop**	**Drop 6**	**Drop 6**	**Drop 6**	**Drop 7**	**Drop 7**	**Drop 7**	**Drop 8**	**Drop 8**	**Drop 8**
HMU	**Pre-drop**	-1.153	-6.765	3.196	1.642	-4.350	3.167	3.022	-6.422	3.129	3.795	-10.630
		0.992	<.001	0.069	0.891	0.001	0.075	0.111	<.001	0.083	0.011	<.001
MSA	**Pre-drop**		-5.612	3.862	2.308	-3.684	4.039	3.894	-5.550	4.128	4.794	-9.632
			<.001	0.008	0.475	0.015	0.004	0.007	<.0001	0.003	<0.001	<.0001
REF	**Pre-drop**			7.102	5.548	-0.444	8.281	8.136	-1.308	8.988	9.654	-4.771
				<.001	<.001	1.000	<.001	<.001	0.977	<.001	<.001	<0.001
HMU	**Drop 6**				-1.203	-5.845	-0.695	-0.794	-7.245	-1.053	-0.632	-9.755
					0.988	<.0001	1.000	1.000	<.0001	0.996	1.000	<.0001
MSA	**Drop 6**					-4.641	0.695	0.596	-5.856	0.421	0.842	-8.281
						0.001	1.000	1.000	<.001	1.000	1.000	<.001
REF	**Drop 6**						6.054	5.955	-0.496	6.106	6.527	-2.597
							<.001	<.001	1.000	<.001	<.001	0.289
HMU	**Drop 7**							-0.122	-8.023	-0.399	0.133	-11.407
								1.000	<.001	1.000	1.000	<.001
MSA	**Drop 7**								-7.901	-0.266	0.266	-11.274
									<.001	1.000	1.000	<.001
REF	**Drop 7**									8.389	8.922	-2.619
										<.001	<.001	0.277
HMU	**Drop 8**										0.596	-12.307
											1.000	<.001
MSA	**Drop 8**											-12.902
												<.001

6) Minimize compensatory increases in non-native rodent abundance

It was expected that if snake populations were drastically reduced by the treated baits there would be an increase in rodent abundance. Rodent live traps were used to capture rats from the HMU and MSA aerial test sites and total captures throughout the study were recorded. Criterion for success was <20% increase in rodent abundance. Analysis of data: The observations analyzed from each transect (one per each of the six sampling blocks for each of the two aerial drop sites and the reference site) were the number of rats captured per trap-night. The analytical structure was a two-factor factorial analysis of variance, where one factor was treatment and the other was time (sampling occasion). Treatments were compared for each sampling occasion using *a priori* contrasts on the treatment x time interaction means.

Amendments:
The modified trapping methods and pre-baiting approved in the Fall 2013 IPR (Appendix D) were instituted in an effort to increase trap success as reviewed and. Typically Hagaruma type traps baited with coconut and with a pre-baiting regime are the preferred methods for Pacific island rodent trapping (Wiewel et al. 2009). However, Haguruma type traps were no longer available so the standard Tomahawk® type traps were modified to a Haguruma type trigger configuration (Appendix D). Because of the modification to rodent traps and capture success was low an offsite trap evaluation was set up comparing the modified traps to standard Tomahawk® traps as a check to ensure traps were working effectively.

In the evaluation traps were placed in a systematically random pattern where traps were alternated along transects in an area where *Rattus* species were known to occupy. The traps were then baited and rodents trapped on these transects and the catch-per-unit-effort (CPUE = the number of rodents caught per 100 trap nights of effort) between trap types was compared using a two sample t-test.

Analyses Results:
Treatment Sites: A total of five rats (likely *Rattus diardii*: Species status on Guam is in question (Wiewel et al. 2009). Hereafter all rats are referred to as *Rattus spp*.) were captured in 2,772 total trap nights of sampling on all three locations. All five roof rats were captured on the HMU location, one on 13, August 2013 prior to bait drops, one on 12 August 2014, and three on 25 and 26 November 2014. Rodent live trapping results were not statistically analyzed as too few rodents were caught on any of the demonstration project sites over the demonstration period to make valid analyses.

Modified Trap Test Results: There was no significant difference in CPUE between modified or standard Tomahawk® traps in the offsite evaluation of modified traps. A total of 12 Rattus spp. were caught in 420 trap nights of effort (210 per trap type). The average CPUE was 3.8 rodents/100 trap nights and 1.9 rodents per 100 trap nights for the modified and standard traps respectively.

Summary conclusions for Rodent Trapping:
The CPUE's for offsite trapping were much greater than that observed for onsite trapping. Applying the offsite CPUE for the modified traps to the demonstration project drop sites would

result in an estimated capture of 106 rodents on the demonstration sites. These results indicate the modified traps worked at least as well as standard traps and were functioning adequately to measure real changes in rodent numbers. Therefore it is concluded that over the demonstration project period there has been no significant compensatory increase in rodent numbers due to a reduction in brown tree snakes associated with aerial bait drops.

7) Minimize non-target impacts (crabs, monitor lizards)

Telemetered DNM flag-baits entangle in vegetation above the ground to mitigate exposure to non-target animals. Bait take by snakes and non-targets of these telemetered baits were determined by tracking the signal and locating the radio transmitter. The numbers of baits taken by non-targets were recorded. Criterion for success was <10% bait take by non-target animals. Analysis of data: Descriptive statistics for calculated percentage of non-target animals that take telemetered bait across all drops.

Analyses Results:
Of the 105 recovered VHF marked toxicant baits only one bait was found in a non-target species; a cane toad (*Rhinella marina*). The cane toad was found on the HMU site on 3 December 2013. However, while checking bait stations one juvenile monitor lizard was found dead on the HMU drop site. The monitor lizard was tested for residual acetaminophen and tested positive indicating it did die from consumption of one or more baits. Counting the monitor lizard there was a < 1.9% non-target bait take rate relative to the number of VHF marked baits deployed.

Summary Conclusions for Minimize Non-Target Impacts (crabs, monitor lizards):
Only one non target was found to have consumed a VHF marked toxicant bait of the 105 deployed and recovered. An additional non-target was discovered opportunistically and tested and found to have been exposed to acetaminophen baits. One of these non-targets was an invasive cane toad and the other was a naturalized juvenile monitor lizard. Even counting both of these species the success metric of a < 10% non-target bait take rate was successfully met.

8) Maximize aircrew performance for delivering radioed baits at regular intervals

GPS coordinates were used to determine distance between the radioed baits. Analysis of data: Descriptive statistics were performed across all drops.

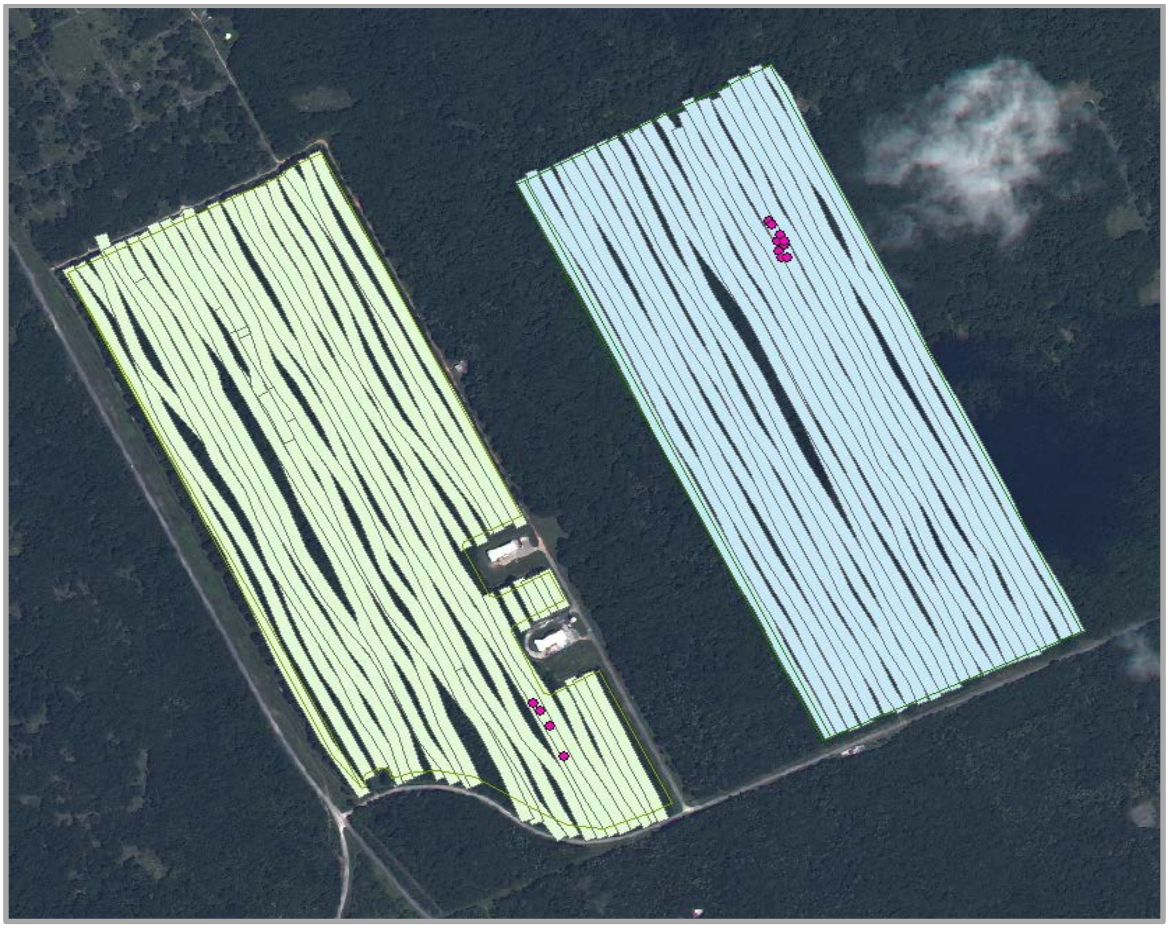
Analyses Results:
The mean distance between telemetered baits dropped on randomly selected aerial transects was 19.3 m (N=96, SD = 16.6 m, Min= 1.0 m, Max = 86.2). Figure 17 provides an example of actual GPS recorded aerial transect locations and VHF marked treated bait locations.

Summary Conclusions for Bait Delivery.

The bait delivery success metric of a mean distance between baits of 20 m $\pm$ 3 m was successfully met. It should be noted that weather (wind and rain) can dramatically affect bait delivery and performance as evidence by the relatively high standard deviation in bait drop

locations. Selection of days to apply baits did take weather into consideration for the entire drop period for bait delivery to be successful.

Figure 17. GPS recorded aerial transect locations (with 20 meter transect width buffer) and randomly selected VHF marked treated bait locations (magenta dots) for aerial applied acetaminophen bait drops on the HMU and MSA drop sites on 2 and 3 December, 2013, respectively.



Qualitative Performance Objective

1) Maximize aircrew work performance during aerial bait deployment**.**

The aircrew's success in this qualitative metric was demonstrated by the successful completion of demonstration project activities. Crews maintained production levels and enthusiasm for all aspects and phases of the demonstration project including: 1) study site establishment of 162, 210 m transects (34 km total), placement of 1,782 bait stations on transects, 2) preparation of 29,700 flagger baits, 3) radio tracking and recovery of 105 VHF marked baits, 4) 15 total aerial bait drops of 1,980 baits each (29,700 total), 5) twice monthly baiting and monitoring of 198 randomly selected bait stations over 34 sessions (6,732 bait stations total), 6) 2,772 total trap nights of rodent sampling on all three locations, and 7) transect and snake barrier maintenance.

7.0 COST ASSESSMENT

7.1 COST MODEL

Table 6 presents a cost model based on the cost estimates in section 7.3 above broken down to a cost per ha basis. Each section represents operational phases and cost per ha for each phase.

Cost Model for Aerial Delivery Technology for a 500 ha site

Cost Element	Data Tracked During the Demonstration	Estimated Cost per ha
Site preparation	Labor cost per hour for delineating area of test sites and transects for monitoring and costs of non-consumable supplies and equipment	$672.33
Bait preparation	Labor cost per hour, costs of consumable supplies and rate of use	$932.91
Aerial Bait deployment	Cost per hour and total hours for rental helicopter and labor for aircrew and flight safety personnel and costs of non-consumable supplies and equipment	$1,624.56
Monitoring	Cost for snake and rodent abundance monitoring and costs of non-consumable supplies and equipment	$2,245.92
Total Cost per ha	Total costs for all the above	$5475.72

7.2 COST DRIVERS

The assessment of cost drivers is based on demonstration project costs and potential issues associated with scaling up to a 500 ha operational program. The assessment is broken down into operational phases in the following order: 1) Aerial site preparation, 2) Aerial bait preparation, 3) Aerial bait deployment, 4) Brown tree snake abundance monitoring, 5) Rodent abundance monitoring.

<u>Aerial drop site preparation</u> – Scaling up to 500 ha would provide an estimated cost of $336,166 ($672/ha) to establish 490 monitoring transects at approximately 1-210 m transect per ha. Most (73%) of this cost was associated with labor for field employees (see Table 7).

<u>Aerial bait preparation</u> – Cost of bait preparation was largely driven by cost of baits, flaggers (39% of the total cost) and labor to prepare baits (35% of total costs; see Table 8). At an application rate of 36/ha it would require 144,000 baits to conduct 8 applications over a one year period. Based on results of the demonstration project this application rate should be sufficient to keep snake numbers at an 80% or more reduction from pre-drop rates.

Aerial bait deployment – Cost of aerial helicopter serves was by far the largest cost associated with this operational phase. Aerial operations cost comprised 64% of this operational phase total costs (See Table 9). There were considerable unexpected costs of helicopter services over the demonstration project. The contractor initially did not indicate that the Bolkow 105 helicopter was not on site and ferry costs would be incurred over the course of the project. After the first drop the service provider refused to fly unless this ferry cost was incorporated as well as a 4 h minimum flight time. As they were the only provider on Guam this essentially would shut down the project. Although some costs were negotiated down ultimately helicopter costs exceeded planned costs. Costs per application for each site averaged $3,584/h were as much as $5,619/h (min = $3,105/h). Costs per deployment were on average $13,573 for each site equating to an average of $5,027 per hour for the actual average deployment time of 2.7 h per 55 ha site. This cost per hour greatly exceeded the planned $2,950/h and $3,150/h for FY13 and FY14 respectively.

Monitoring – Monitoring includes assessing bait take of telemetered treated bait by snakes and non-target animals, and BTS abundance using bait take of untreated DNM in bait stations and capture of rodents in live traps. Monitoring to evaluate effects of aerial bait drops on snake numbers would be an essential component of any operational brown tree snake control program and is also the most labor intensive aspect of a control program overall. Total labor costs for snake and rodent monitoring account for 71% of total costs for this phase of an operational program (See Tables 11 and 12).

Total Costs – Labor costs were the single largest driver of operational costs and account for 48% of total costs (see Table 13). The second largest single component was aerial operations costs which accounted for 19% of total costs. If bait and flagger costs are included the total is 25%. Methods to reduce labor costs, particularly associated with monitoring, and aerial operation costs would be logical focus areas for cost control in an operational program.

7.3 COST ANALYSES AND COMPARISON

The following cost analyses and comparison is based on demonstration project costs scaled up to a 500 ha operational program. The cost assessment is broken down into operational phases in the following order: 1) Aerial site preparation, 2) Aerial bait preparation, 3) Aerial bait deployment, 4) Brown tree snake abundance monitoring, 5 Rodent abundance monitoring, 6) Total cost.

Aerial site preparation – For calculating area (ha) of the site and establishing transects for monitoring snake and rodent abundance. Personnel costs per hour, total time, and payroll records, as well as consumable supplies such as flagging were tracked. The life-cycle cost estimate was per annum and scaling was from 110 ha [the two 55 ha aerial drop sites (HMU and MSA)] to 500 ha. The demonstration has nine monitoring transects per 9.2 ha [each of the two 55 ha aerial drop sites were divided into six blocks and each block (9.2 ha) has nine transects] and transect density per ha could be reduced for implementation sites. The decrease in transect density has not been determined. However, labor costs may not be reduced due to the much larger size of the implementation sites and accessibility to these transects. Annual salary increases will increase the cost estimate.

Cost for initial establishment of transects on the 2-55 ha drop sites was $70,263 ($639/ha), during FY 2013. This included costs for one supervisory staff, one GIS staff, admin, and five field staff measuring and clearing N=108, 210 m transects (i.e. 54 on each site), access to transect locations, vehicle fuel, supplies, and overhead. Because rodent trapping was done on the same transects as bait station monitoring for snake bait take rate, a separate estimate for rodent monitoring transect establishment was not necessary.

Scaling up to 500 ha would provide an estimated cost of $336,166 ($672/ha) to establish 490 monitoring transects at approximately 1-210 m transect per ha. Most of this cost was associated with labor for field employees (Table 7). Subsequent maintenance costs for transects are not included in this estimate. It should be noted that this estimate assumes that all areas of a 500 ha drop site would be as accessible as the demonstration project sites. This may not be the case and more difficult access could add substantially to costs.

The intensity of monitoring necessary to fully evaluate the aerial acetaminophen bait drop technology may not be necessary or feasible for subsequent larger scale operations applications. Density of one transect per ha could be reduced or placement of transects could be in representative but smaller monitoring areas (e.g. random 10 ha plots) within the overall drop zone. Altering monitoring strategies should be carefully evaluated prior to implementation but could be a potential source of substantial cost savings in subsequent transect establishment, maintenance and monitoring at larger operational scales.

Table 7. Estimated budget to establish N=490, 210 m transects for bait station monitoring and rodent trapping to evaluate effects of aerial bait drop of DMN baits with an internal 80 mg acetaminophen tablet on brown tree snake numbers for a 500 ha drop site.

Estimated Cost For Establishing 490, 210 m Transects On A 500 Ha Drop Site	
Category	Amount
Supervisory Salary	$6,147
GIS/Field Support	$4,152
Technicians (15 Full Time Equivalent [FTE] * 3 mo)	$229,133
Safety Ofc.	$1,642
Administrative	$5,223
Total Salary	$246,296
Vehicle/Maintenance/Fuel	$1,688
Rent/Utilities/Other Services	$2,124
Equipment	$8,250
Supplies	$6,027
Operating Total	$18,089
Total Direct Costs	$264,385
Overhead	$71,781
Total	$336,166

<u>Aerial bait preparation</u> – For preparing acetaminophen-treated DNM baits with and without radio transmitters for aerial test sites. Personnel costs per hour, total time, and payroll records

were tracked in addition to acetaminophen tablets, DNM, paper streamer flags, and radio transmitters that are consumable supplies. The life-cycle cost estimate was per annum and scaled from 110 ha to 500 ha.

Cost of bait preparation was largely driven by cost of baits, flaggers and labor to prepare baits. At an application rate of 36/ha it would require 144,000 baits to conduct eight applications over a one year period. Based on results of the demonstration project this application rate should be sufficient to keep snake numbers at an 80% or more reduction from pre-drop rates. Given this information, the total annual cost of aerial bait preparation and tracking equipment is estimated at $466,457 (Table 8).

Table 8. Estimated budget to produce DMN baits with an 80 mg acetaminophen tablet inserted for 8 bait drops on a 500 ha drop site at 36 baits/ha. This estimate includes costs for toxicant baits with a VHF transmitter inserted for bait fate monitoring.

Estimated Cost of Bait Preparation for a 500 ha Site			
Category	Number of units	Cost per unit	Cost
Cost Of Acetaminophen Tablets At 36/Ha	144,000	$ 0.25	$ 36,000
DNM at 36/Ha and 8-Applications/year	144,000	$ 0.50	$ 72,000
Bait Preparation Cost at 5 FTE/1000 Baits/8h	5760	$ 28.56	$ 164,506
Cost Of VHF (20 Per 110/ha)	90	$ 165.00	$ 14,850
Flaggers At 36/Ha	144,000	$0.50	$ 72,000
Radio Tracking Equipment	3	$2,500.00	$ 7,500
Overhead			$ 99,601
Total Bait Prep			$ 466,457

Figure 18. Preparation of acetaminophen treated DNM for aerial application to control brown tree snakes. Images are of manual insertion of 80 mg acetaminophen tablets into DNM, attachment to flaggers, and storage in metal boxes which were then placed in a freezer until date of application.

Aerial bait deployment – Treated baits were deployed using a contracted helicopter/pilot and cost per hour and total time were tracked. Additionally, labor cost per hour and total time for aircrew to maintain flight paths via computer and drop baits, landing zone manager for maintaining

radio contact (required by USDA flight safety regulations), and ground based personnel were tracked. Non-consumable safety equipment for the aircrew were tracked. Except for safety equipment, the life-cycle cost estimate was per annum and scaling from 110 ha to 500 ha. Safety equipment costs were annuitized.

Figure 19. Bolkow 105 Helicopter and crew in preparation for aerial deployment of DNM treated with an 80 mg acetaminophen tablet to control brown tree snakes. Racks in image to the right contain DNM baits attached to flaggers.

Table 9. Estimated budget for aerial operations to deliver DMN baits with an 80 mg acetaminophen tablet inserted for 8 bait drops on a 500 ha drop site at 36 baits/ha.

Estimated Cost of Aerial Bait Drop Operations for a 500 ha Site		
Category	Amount	
Supervisory Salary (0.2 FTE)	$	13,738
GIS/Field Support (0.125 FTE)	$	4,824
Technicians/Aircrew (0.15 FTE)	$	72,162
Safety Officer (0.25 FTE)	$	12,929
Administrative (0.125 FTE)	$	9,841
Total Salary	$	113,494
Helicopter Cost ($3,370/h/19.2h/incl. Fuel for two ferry and two drop flights per deployment)	$	517,632
Annuitized Vehicle/Maintenance/Fuel	$	360
Rent/Utilities/Other Services	$	224
Equipment (Safety Equipment Annuitized)	$	5,992
Supplies	$	1,135
Operating Total	$	7,711
Total Direct Costs	$	638,837
Overhead	$	173,444
Total	$	812,281

There are several factors that will influence costs per hour for scaled up estimates. It is unlikely that the 4 hour minimum would be a factor as flights times will exceed the minimum for a 500 ha drop site. Ferry time would be a factor assuming the same contractor is used and was included in subsequent cost estimates. Applications were more efficient toward the end of the demonstration project declining from an average of 2.8 h to 2.6 hours per 55 ha site (min=2.1 h). Not having to differentiate between bait sites and locations and running longer transects with less time for turning may also make deployments more efficient. It may also be possible to increase the size of the bait rack on the helicopter and add additional baits, reducing the number of trips to reload. Based on these factors it was assumed that baits could be applied to 250 ha per 8 h flight for the resulting budget (Table 9).

Scaling up to operational brown treesnake control programs will likely have other economies of scale. For example larger contracts may encourage additional flight services to bid at lower cost per hour flight times. In addition, USDA, WS has their own aviation program with both fixed and rotary wing aircraft. It is likely that the USDA, WS cost of flights would be substantially less than the current private contractor cost estimates on a cost per hour basis. However, getting a helicopter to Guam would likely incur considerable cost and would not be justified for USDA except for larger areas (≥ 500 ha) and multi-year contracts. Lastly, development of automated bait delivery technology may further increase aerial application efficiency.

<u>Budget Estimate Using Automated Bait Delivery Device Technology:</u>
USDA, WS, NWRC researchers are currently developing an automated bait delivery device to increase efficiency of aerial deployment of toxicant baits to control brown tree snakes. The automated system has several characteristics which could increase efficiency of bait drops and reduce costs. Primary cost savings with this technology are: 1) only one aircrew member is needed versus three with hand delivery, 2) air speed is increased at least 2 fold over hand delivery, 3) bait deployment rate is up to 4/ second, or 14,400 per hour; so a 500 ha site could theoretically be baited in 1.25 hours, 4) device capacity of 3,600 baits/load vs 990 for manual application. The currently used Bolkow 105 helicopter could potentially carry up to 7,200 baits requiring only 2.5 reloads on a 500 ha site. Expected production cost of DNM baits is about $1.00 per bait. Current hand baiting technology allows for about 1,000 baits per flight. Given these potential increases in bait delivery efficiency an estimated one day of delivery at 3,600 baits per load and one day of preparation for bait drops was used. The total estimated cost for bait delivery on a 500 ha site using the automated bait delivery technology is estimated at $450,975, a 44% cost savings over the current technology. These estimates are theoretical as the technology has not yet been field tested.

Table 10. Estimated budget to aerially deliver via helicopter and automated delivery device DMN baits with an internal 80 mg acetaminophen tablet for 8 bait drops on a 500 ha drop site at 36 baits/ha.

Estimated Cost of Automated Aerial Bait Drop Operations for a 500 ha Site	
Category	Amount
Supervisory Salary (0.1 FTE)	$ 6,856
GIS/Field Support (0.125 FTE)	$ 1,930
Technicians (0.08 FTE)	$ 22,516
Safety Officer (0.125 FTE)	$ 5,172
Administrative (0.125 FTE)	$ 9,841
Total Salary	$ 46,314
Helicopter Cost ($3,370/h/11.2h/incl. Fuel for two ferry and one drop flight per deployment)	$ 301,952
Annuitized Vehicle/Maintenance/Fuel	$ 120
Rent/Utilities/Other Services	$ 70
Equipment (Safety Equipment Annuitized)	$ 5,992
Supplies	$ 232
Operating Total	$ 6,414
Total Direct Costs	$ 354,680
Overhead	$ 96,296
Total	$ 450,975

Monitoring – Monitoring includes assessing bait take of telemetered treated bait by snakes and non-target animals, and BTS abundance using bait take of untreated DNM in bait stations and capture of rodents in live traps. Personnel costs per hour, total time, consumable supply costs of DNM and non-consumable supply costs of plastic bait stations and rodent live traps were tracked. Except for non-consumable supply costs, the life-cycle cost estimate was per annum and scaling from 110 ha to 500 ha. Non-consumable supply costs were annuitized.

Monitoring to evaluate effects of aerial bait drops on snake numbers would be an essential component of any operational brown tree snake control program. Monitoring is also the most labor intensive aspect of a control program overall. Scaling up from the demonstration project and maintaining the same level of monitoring effort would require the establishment of 490, 210m transects, with 11 bait stations on each transect, from which 54 (594 bait stations) would be randomly selected twice monthly for baiting, monitoring and evaluation of bait take rates. To prevent entrainment of snakes to bait stations which may artificially increase bait take rates, random selection of transects is critical. The budget for bait station monitoring in Table 11 reflects this level of monitoring.

It may be possible to reduce the number of transects and possibly the frequency (e.g. once every 3-4 weeks) and still maintain the ability to detect changes in snake numbers on a 500 ha site. For example it may be possible to reduce the total number of transects to 162 and randomly select 54 transects from that group. This would reduce up-front costs of transect establishment, reduce the number of bait tubes and transect maintenance, and reduce monitoring effort, potentially reducing costs substantially.

Figure 20. A field crew checking bait stations for brown tree snake activity during the aerial acetaminophen bait drop, Andersen AFB, Guam.

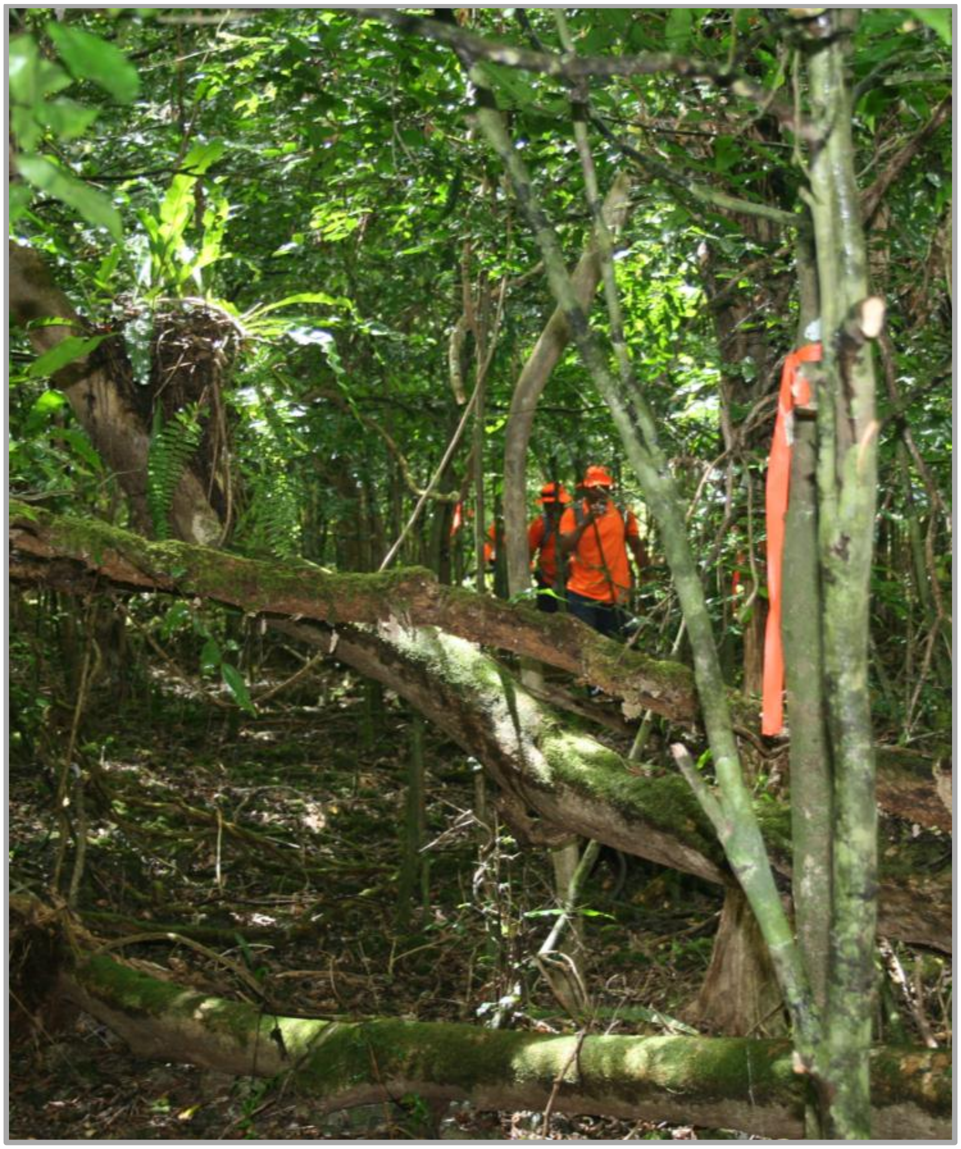


Table 11. Estimated budget to monitor 54 randomly selected transects twice monthly as an index of brown tree snake numbers to evaluate effects of aerially applied acetaminophen treated DNM baits for one year on a hypothetical 500 ha bait drop site.

Estimated Cost of Bait Station Monitoring for a 500 ha Drop Site		
Category	Amount	
Supervisory Salary (0.4 FTE)	$	53,231
GIS/Field Support (0.125 FTE)	$	13,330
Technicians (7.5 FTE)	$	507,729
Safety Officer (0.125 FTE)	$	11,372
Administrative (0.25 FTE)	$	22,745
Total Salary	$	608,407
Vehicle Annuitized Cost/Maintenance/Fuel	$	27,000
Rent/Utilities/Other Services	$	15,480
DNM Baits	$	3,564
Equipment	$	4,604
Supplies	$	9,126
Operating Total	$	59,775
Total Direct Costs	$	668,181
Overhead	$	181,411
Total	$	849,593

Although there was no measurable increase in rodent numbers on the drop sites over the demonstration project period, the need for monitoring rodent's remains. The 16 months of monitoring on the demonstration project may not have been long enough to allow establishment of a rodent population. As with bait station monitoring, labor is a large component of the cost of rodent monitoring. Rodent monitoring should be conducted on the same transects as bait stations saving some start-up cost. Given a proportional effort as the demonstration project's rodent monitoring, a 500 ha drop site would require monitoring of 54 transects with 11 traps on each transect (594 traps) which would be monitored for 2 days (1,188 trap nights) each session, and pre-baited with coconut for <72 hours prior to trap set. Monitoring would occur quarterly and transects would be randomly selected in each monitoring period. Unlike the demonstration project, all rodents trapped in an operational program would likely be euthanized as they are an invasive species. The budget estimate given below is based on the aforementioned level of rodent trap monitoring.

As with bait station monitoring, it may be possible to reduce the number of transects and still maintain the ability to detect changes in rodent numbers on a 500 ha site. Since monitoring of rodent traps and bait stations occurs on the same transects changes to one monitoring effort would affect the other and this should be considered with respect to operational design. A similar

reduction in costs as bait station monitoring could be achieved by reducing the number of transects and total number of traps checked.

Table 12. Estimated budget to monitor 54 randomly selected transects quarterly on a hypothetical 500 ha bait drop site as an index of rodent numbers to measure potential compensatory increase in rodent numbers due to brown tree snake control.

Estimated Cost of Rodent Trap Monitoring for a 500 ha Site	
Category	Amount
Supervisory Salary (0.2 FTE)	$ 8,665
GIS/Field Support (0.125 FTE)	$ 4,958
Technicians (7.5 FTE)	$ 175,333
Safety Officer (0.125 FTE)	$ 2,470
Administrative (0.125 FTE)	$ 1,852
Total Salary	$ 193,279
Vehicle Annuitized Cost/Maintenance/Fuel	$ 9,000
Rent/Utilities/Other Services	$ 5,160
Trap Bait (54 transects/11 traps/session+bait)@$0.50 ea.	$ 1,188
Equipment	$ 1,535
Supplies	$ 4,832
Operating Total	$ 21,715
Total Direct Costs	$ 214,993
Overhead	$ 58,371
Total	$ 273,364

Equipment procurement – For maintaining helicopter on prescribed flight paths and delineating test sites and transect lines. Formal and on-the-job training were required for personnel to be proficient in instruments for maintaining helicopter flight paths and GIS/GPS of study sites, as well data collection. Invoices for all equipment purchases and training were tracked. Field life of this equipment is estimated to be 5-8 years. The equipment and training estimates were annuitized so it can be extrapolated over a longer period.

Equipment purchases have been annuitized over a 5 year service life. Annuitized equipment costs on an annual basis for a 500 ha bait drop operational program would be $42,731. This includes costs for VHF transmitters and receivers although it should be noted that only receivers are annuitized as transmitters have about a one year life. Annuitized equipment costs are included in the above estimates for each breakdown of the operational aerial bait drop program on a 500 ha site.

Vehicles – Vehicles were used for transporting personnel and supplies to the aerial test sites. Purchase price, fuel, and maintenance record costs were tracked. Field life of the vehicles was

estimated to be 5-8 years. The vehicle cost was annuitized so it can be extrapolated over a longer period.

Initial vehicle purchase costs are substantial ($210,000 for seven vehicles) but for a longer term operational program. The annuitized cost of the estimated seven vehicles needed to support field crews for bait station monitoring, rodent monitoring, VHF tracking, site maintenance and aerial operations support would amount to $26,250 -$42,000 per year based on a 5-8 year operational life. Annual costs including the annuitized vehicle cost, fuel, and maintenance amount to $38,048-$60,877 per year based on a 5-8 year operational life. Annuitized vehicle costs are included in the above estimates for each breakdown of the operational aerial bait drop program on a 500 ha site.

<u>Overall Operational Cost for a 500 ha control Site:</u>

The estimated budget to aerially apply DMN baits with an internal 80 mg acetaminophen tablet by hand over a 500 ha site including monitoring of brown tree snake numbers, rodent trapping and monitoring, and VHF tracking for determination of bait fate is estimated at $2,737,860 in FY15 dollars (Table 13).

The demonstration project cost $1,876,430 to complete including the research component. Given that a 500 ha site is 3.03 times the area of the all demonstration project sites combined and 4.54 times the area of the demonstration project drops sites, there may be economies of scale cost reductions for an operational program relative to the demonstration project. A strict scale up from the 165 ha demonstration site not including the NWRC research component would result in a conservative operational cost of $4,329,343. Some of this difference in cost can be associated with a three year delay (2009-2012) in start-up of the demonstration project which incurred additional costs (See White Paper15 May 2013 Appendix F). Regardless, a complete operational program with monitoring effort proportional to what was conducted on the demonstration project would be on the order of $5,476/ha to implement with current technology.

Table 13. Estimated budget to aerially apply DMN baits with an internal 80 mg acetaminophen tablet over a 500 ha site including monitoring of brown tree snake numbers, rodent trapping and monitoring, and VHF tracking for determination of bait fate.

Estimated Total Cost of Aerial control of Brown tree snakes on a 500 ha Site	
Category	Amount
Supervisory Salary (1 FTE)	$81,781
GIS/Field Support (0.58 FTE)	$27,264
Technicians (14.2 FTE)	$1,148,863
Safety Officer (0.22 FTE)	$28,413
Administrative (0.35 FTE)	$39,661
Total Salary	$1,325,981
Vehicle/Maintenance/Fuel	$38,048
Rent/Utilities/Other Services	$22,988
Helicopter Aerial Operations Cost	$517,632
Bait Station DNM cost	$3,564
Rodent Trap Baits	$1,188
Aerial Ops DNM Bait and Flagger costs	$180,000
Equipment	$42,731
Supplies	$21,120
Operating Total	$827,271
Total Direct Costs	$2,153,252
Overhead	$584,608
Total	$2,737,860

Estimated Cost of Bait Drops Using an Automated Delivery System.

If an automated delivery system is successfully developed and assumptions on performance parameters are correct the automated system should reduce overall costs by about 13%. This assumes that all monitoring effort and support are similar to the demonstration project. In this scenario the reduction in cost is solely associated with the reduction in cost of aerial operations. The resulting operational cost estimate given these caveats is $2,376,554 in FY 15 dollars. The estimate here is an operational estimate and does not include the purchase price of equipment as their currently is no cost estimate. This equipment would be annuitized over a 5-8 year life and presumably operational savings would provide a significant return on investment.

As mentioned in previous section of the Cost and Performance section of this report there may be other sources of savings in an operational brown tree snake control program. Bait station monitoring is the single costliest aspect of an operational control program. Combined with rodent

monitoring and transect establishment, monitoring efforts account for more than half of the total costs of the control effort. There are several options with respect to monitoring in support of an operational control program that could provide substantial cost savings.

One option is to reduce the number of transects established for monitoring. As currently designed there would be 490 transects established of which only 54 would be randomly sampled in each bait station or rodent monitoring session. While this number of transects would ensure a drop site spatial coverage of one transect per ha, this level of coverage may not be necessary. For example reducing the number of transects by 56% to 216 (2.3/ha) may provide suitable coverage and still allow a 4:1 ratio of transects to randomly select from for each monitoring session and prevent entrainment of brown tree snakes to bait stations. If this strategy were implemented a commensurate decrease in transect establishment and monitoring costs may be possible, saving almost $650,000 on operational costs per year. Combined with an automated aerial bait delivery system this could bring overall costs down to about $2.1 million for a 500 ha site.

While the demonstration project clearly indicated the aerially delivery of acetaminophen treated DNM bait technology can successfully and significantly reduce brown tree snake numbers, there are still many aspects of the technology that can be further developed and refined. As with many technology transfer efforts, there were many refinements and changes to the technology subsequent to development. Many of the aforementioned developments could lower operational costs substantially. USDA, WS, NWRC and public and private partners are currently working on technologies to help develop these cost savings.

8.0 IMPLEMENTATION ISSUES

8.1 REGULATORY COMPLIANCE

A substantial regulatory burden must be addressed prior to any field operation. All field operations to control brown tree snakes would be subject to the federally required NEPA process. Wildlife Services requirements are under Animal and Plant Health Inspection Service (APHIS) NEPA Implementing Procedures at 7 CFR Part 372.5(c)(2)(i). This CFR encompasses projects that result in death of a large number of animals or a large proportion of the population, projects which may adversely affect T&E species, and projects with uncertain environmental impacts. The NEPA document would need to be reviewed and supported by the Department of Interior U.S. Fish and Wildlife Service including a Biological Opinion and Section 7 Endangered Species Act consultation. A federal take permit would need to be obtained from the DOI-USFWS and a permit from the Guam Department of Agriculture for application of toxicant baits. In addition any staff involved in toxicant application will need to take and pass the Guam Department of Agriculture, Pesticide Applicators Examination. Because of WS unique position dealing with wildlife damage issues they have their own NEPA staff to address NEPA requirements for large scale control actions.

Currently flag-baits are deployed by hand from a helicopter at 36 baits per ha, the EPA registered application rate (Registration #56228-34) currently held by the WS, NWRC. Any changes to the application rate would need approval through the EPA which can take 2-3 years. The WS, NWRC technology transfer program can aid in this process to obtain approval for changes, potentially reducing the timeframe to approval.

All aerial operations (contractual or in-house) involving WS staff must have a pre operational safety review of pilot and aircrew per WS Aviation Training & Operations Center (ATOC). All aircraft must be maintained in accordance with Federal Aviation Regulation (FAR) part 135 and FAR Part 91 as applicable, to include 100 hour/annual inspections and compliance with the manufacturer's recommendations for Time Between Overhaul (TBO) and Time In Service (TIS). All aircraft and operators covered by this agreement must be certified under the provisions of FAR Part 135, "Operating Requirements: Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft." In addition to Federal Aviation Administration (FAA) requirements all aircraft involving WS staff must conform to requirements of the WS-ATOC safety manual and program.

Other regulatory considerations include Executive Order 13112 (February 3, 1999) – Invasive Species; Brown Tree Snake Control and Eradication Act of 2004 – H.R. 3479, Section 4; Defense Transportation Regulation Part V Chapter 505 Agricultural Cleaning and Inspection Requirements (29 September 2006); Brown Tree Snake Control and Interdiction Plan, Prepared by: Commander U.S. Naval Forces Marianas, Facilities & Environment N45, August 2004; and Andersen Air Force Base 36 Wing Instruction 32-7004 – Brown Treesnake Management, 15 March 2006. These regulations and directives are for the control of BTS but do not specifically call for the development of aerial delivery of treated baits for landscape control of snakes. Modification may be necessary to encompass large scale operational control programs on Guam.

8.2 END USER CONCERNS

Other non-regulatory implementation issues include cost of deployment of toxicant baits and monitoring associated with a large scale operational program. Wildlife Services and NWRC and public and private partners are currently working on technologies to help develop refinements to the technology that could result in significant cost savings such as automated technologies. These ideas are discussed in Section 7 Cost Assessment.

Non-target bait take would be a concern in any application of toxicant baits to control brown tree snakes. Addressing the application and monitoring issues above and having an effective monitoring program would be necessary for any operational program. The Demonstration Project indicated that at least on relatively isolated DOD lands non-target bait take rate was very low. However, expansion of programs into different areas and habitats could increase non-target risk. These risks would need to be evaluated as part of the NEPA and permitting process and may require further research to evaluate. Addressing these issues proactively would reduce potential for delay in initiating operational programs.

Cost of deployment of toxicant baits to control brown tree snakes is one of the biggest concerns with a large scale operational program. While the demonstration project clearly indicated the aerially delivery by hand of acetaminophen treated DNM bait technology can successfully and significantly reduce brown tree snake numbers, there are still many aspects of the technology that can be further developed and refined. These developments could lower operational costs substantially. One significant consideration is the amount of effort for monitoring that went into the demonstration plan may not be necessary for an operational plan now that the technology has been demonstrated successfully. Monitoring will likely always be required where toxicant will be applied over large areas but monitoring intensity pre unit area may be reduced. These ideas are discussed in Section 7 Cost Assessment. In addition, automated technologies are being developed that may provide further efficiencies and cost reductions. The USDA, WS, NWRC and public and private partners are currently working on technologies to help develop these cost savings.

Application of baits was affected by a number of factors but wind and rain were of particular concern. Applications should be avoided when winds might exceed 15 kilometers per hour or rain events may occur within 48 h post drop. Using telemetered baits to track bait fate presented challenges in field application. The issue was that snakes were taking the baits but a large number appeared to regurgitate the VHF transmitter prior to mortality. This fact made determination of fate and take rate difficult. Modification to the type of transmitter used, (e.g. implantable, sealed, transmitters) or other methods (testing for acetaminophen residue) may help with this facet of monitoring which is critical for determining bait fate during implementation.

Rodent monitoring will likely be a necessary component of any operational program. An increase in rodent numbers could negate effects of reducing brown tree snake numbers. The preferred Haguruma style traps for Pacific island rodent trapping are no longer made. Due to this situation standard t Tomahawk® type traps were modified to a Haguruma type trigger configuration. Monitoring rodent numbers adds additional time and expense to any operational plan. Since non-native invasive rodent would likely be euthanized in an operational program, this

must be factored into regulatory requirements such as Federal take permitting and NEPA documentation.

Non-target bait take would be a concern in any application of toxicant baits to control brown tree snakes. Addressing the application and monitoring issues above and having an effective monitoring program would be necessary for any operational program. The Demonstration Project indicated that at least on relatively isolated DOD lands non-target bait take rate was very low. However, expansion of programs into different areas and habitats could increase non-target risk. These risks would need to be evaluated as part of the NEPA and permitting process and may require further research to evaluate. Addressing these issues proactively would reduce potential for delay in initiating operational programs.

8.3 PROCUREMENT ISSUES

There was a single private contract supplier for helicopter services with capability for doing bait drops on Guam. Costs associated with this service were much greater than anticipated (See Section 7 Cost Assessment). Meeting the demands of implementing larger scale programs and dealing with sole source contractual issues and costs may be problematic. Wildlife Services operates their own fixed and rotary wing aircraft and as such have fully trained support staff, pilots, aircrew and policy and procedures to support flight operations. If large scale operations justifying use of WS aircraft are implemented this could facilitate performance of operational programs.

Currently the NWRC is the only manufacturer of the specially formulated acetaminophen tablets for use in aerial bait drops. NWRC could easily meet demand for tablets on the aerial bait drop demonstration project but larger scale operations may require expansion of staff, facilities and equipment to meet demand. While equipment for hand baiting is readily available, equipment being developed for automated delivery of baits is not. All automated equipment is custom built and unique to this application and would likely need to be sole sourced to the supplier. This sole supplier situation is likely to remain the case in this niche market without substantial commercial growth potential. Currently automated delivery and equipment are in a research test phase of development by WS, NWRC with further information forthcoming.

9.0 REFERENCES

Brooks, J.E., P.J. Savarie, and R.L. Bruggers. 1998a. the toxicity of commercial insecticide aerosol formulations to brown tree snakes. *The Snake* 28:23-27.

Brooks, J.E., P.J. Savarie, and J.J. Johnson. 1998b. The oral and dermal toxicity of selected chemicals to brown treesnakes. *Wildlife Research* 25(4):427-435.

Clark, L., and J. Shivik. 2002. Aerosolized essential oils and individual natural product compounds as brown treesnake repellents. *Pest Management Science* 58:775-783.

Clark, L. 2003. QA-956 Final Report – Efficacy of aerial broadcast baiting in reducing brown treesnake numbers. USDA/National Wildlife Research Center, Fort Collins, CO 11 p.

Clark, L. and P. J. Savarie. 2012. Efficacy of aerial broadcast baiting in reducing brown treesnake numbers. *Human–Wildlife Interactions* 6(2):212–221.

Engeman, R.M., and D.S. Vice. 2001. Objectives and integrated approaches for the control of brown treesnakes. *Integrated Pest Management Reviews* 6:59-76.

Fritts, T. H. 1988. The brown tree snake, *Boiga irregularis*, a threat to Pacific islands. U. S. Fish and Wildlife Service, Biological Report 88 (31). 36 pp.

Fritts, T.H. 1990. Risks to infants on Guam from the bites of the brown treesnake. *American Journal of Tropical Medicine and Hygiene* 42:607-611.

Fritts, T. H., and M. J. McCoid. 1999. The threat to humans from snakebite by snakes of the genus *Boiga* based on data from Guam and other areas. In G. H. Rodda, Y. Sawai, D. Chizar, and H. Tanaka (eds.), Problem snake management: the habu and the brown treesnake, pp. 116-127. Cornell Univ. Press, Ithaca, New York.

Fritts, T. H., M. J. McCoid, and D. M. Gomez. 1999. Dispersal of snakes to extralimital islands: incidents of the brown treesnake *(Boiga irregularis)* dispersing to islands in ships and aircraft. based on data from Guam and other areas. In G. H. Rodda, Y. Sawai, D. Chizar, and H. Tanaka (eds.), Problem snake management: the habu and the brown treesnake, pp. 209-223. Cornell Univ. Press, Ithaca, New York.

Hall, T.C. 1996. Operational control of the brown treesnake on Guam. *Proceedings of the Vertebrate Pest Conference* 17:234-240.

Hayter, A. J. (1989), "Pairwise Comparisons of Generally Correlated Means," Journal of the American Statistical Association, 84, 208–213.

Hocking, R. R. (1985), The Analysis of Linear Models, Belmont, CA: Brooks/Cole.

Perry, G., E.W. Campbell, III, G.H. Rodda, and T.H. Fritts. 1998. Managing island biotas: Brown Treesnake control using barrier technology. Pages 138-143 *in* R.O. Baker and A.C. Crabb, editors. Proceedings 18th Vertebrate Pest Conference. Univ. of California, Davis, California.

Rodda, G.H., T.H. Fritts, and P.J. Conry. 1992. Origen and population growth of the brown treesnake, *Boiga irregularis,* on Guam. *Pacific Science* 46:46-57.

Rodda, G.H., and T. H. Fritts. 1992. The impact of the introduction of the colubrid snake *Boiga irregularis* on Guam's lizards. *Journal of Herpetology* 26:166-174.

SAS Institute. 2011. SAS/STAT User's Guide V. 9.3. SAS Institute, Cary, NC, USA.

Savarie, P.J., D.L. York, J.C. Hurley, S. Volz, and J.E. Brooks. 2000. Testing the dermal and oral toxicity of selected chemicals to brown treesnakes. *Vertebrate Pest Conference* 19:139-145.

Savarie, P.J., J.A. Shivik, G.C. White, J.C. Hurley, and L. Clark. 2001. Use of acetaminophen for large-scale control of brown treesnakes. *Journal of Wildlife Management* 65(2):356-365.

Savarie, P.J., and K.Tope. 2004. Potential flotation devices for aerial delivery of baits to brown treesnakes. *Vertebrate Pest Conference* 21:27-30.

Savarie, P.J., T.C. Mathies, and K.A. Fagerstone. 2007. Flotation materials for aerial delivery of acetaminophen toxic baits to brown treesnakes. Pages 218-223 *in* G.W. Witmer, W.C. Pitt, and K.A. Fagerstone, editors. Managing vertebrate invasive species: proceedings of an international symposium. USDA/APHIS/National Wildlife Research Center, Fort Collins, Colorado, USA.

Savidge, J.A. 1987. Extinction of an island forest avifauna by an introduced snake. *Ecology* 68:660-668.

Shwiff, S.A., K. Gebhardt, K.N. Kirkpatrick, and S.S. Shwiff. 2010. Potential economic damage from introduction of brown tree snakes, *Boiga irregularis* (Reptilia: Colubridae), to the islands of Hawai`i. *Pacific Science* 64:1-10.

Shivik, J.A., P.J.Savarie, and L. Clark. 2002. Aerial delivery of baits to brown treesnakes. *Wildlife Society Bulletin* 30(4):1062-1067.

SOP FP 034.00. Recovery and handling of animals found dead during routine field activities. 6 May 2010. NWRC Standard Operating Procedure. 2 pp.

SOP LP 004.00. Acetaminophen tablet preparation. 31 October 2001. NWRC Standard Operating Procedure. 6 pp.

Vice, D.S., and D.L. Vice. 2004. Characteristics of brown treesnakes *Boiga irregularis* removed from Guam's transportation network. *Pacific Conservation Biology* 10:216-220.

Wiewel, A. S., A. A. Y. Adams, and G. H. Rodda. 2009. Distribution, density, and biomass of introduced small mammals in the Southern Mariana Islands. Pac. Sci. 63: 205-222.

Appendix A: Points of Contact

POINT OF CONTACT Name	ORGANIZATION Name Address	Phone Fax E-mail	Role in Project
Brian S. Dorr	USDA-APHIS-WS National Wildlife Research Center P.O. Box 6099, MS State, MS 39762	P: 662-325-8216 brian.s.dorr@aphis.usda.gov	Principal Investigator
Craig S. Clark	USDA/WS 233 Pangelinan Way Barrigada, GU 96913	P: 671-635-4400 craig.s.clark@aphis.usda.gov	Co-investigator, Operations Manager
Lisa Naputi	USDA/WS 3375 Koapaka Street Suite H-420 Honolulu, HI 96819	Tel: (808) 838-2842 Lisa.T.Naputi@aphis.usda.gov	Administrative Officer
Julie A. Fierstine	USDA-APHIS-WS National Wildlife Research Center 4101 LaPorte Avenue Fort Collins, CO 80521	P: 970-266-6134 Julie.A.Fierstine@aphis.usda.gov	Supervisory Budget Analyst
Gail Keirn	USDA-APHIS-WS National Wildlife Research Center, 4101 LaPorte Avenue, Fort Collins, CO 80521	P: 970-266-6007 Gail.M.Keirn@aphis.usda.gov	Legislative and Public Affairs

Appendix B: Data to determine canopy landing and distance between VHF marked flagger toxicant baits dropped on randomly selected portions of aerial transects. Blank cells in the distance category represent the first transmitter location in the drop series. Cells with N/A indicate that no data were recorded due to deployment failure, transmitters not recovered, or canopy landing status not confirmed.

	Flagger and Bait Location Data							
Bait Drop Session	**Date Flagger Deployed**	**Date Flagger Located**	**Site**	**Radio Freq.**	**UTM N**	**UTM E**	**Distance Between Flaggers (M)**	**Canopy Or Ground**
Drop 1	3-Sep-13	4-Sep-13	HMU	162.440	13.59201	144.86261		G
Drop 1	3-Sep-13	4-Sep-13	HMU	163.259	13.59210	144.86257	9.85	C
Drop 1	3-Sep-13	4-Sep-13	HMU	162.590	13.59178	144.86274	36.24	G
Drop 1	3-Sep-13	4-Sep-13	HMU	162.414	13.59179	144.86271	3.16	C
Drop 1	3-Sep-13	4-Sep-13	HMU	162.540	13.59117	144.86308	72.20	C
Drop 1	3-Sep-13	4-Sep-13	HMU	162.504	13.59146	144.86295	31.78	C
Drop 1	3-Sep-13	4-Sep-13	HMU	162.522	13.59153	144.86285	12.21	C
Drop 1	3-Sep-13	4-Sep-13	HMU	162.380	13.59141	144.86286	12.04	G
Drop 1	3-Sep-13	4-Sep-13	HMU	162.444	13.59189	144.86267	51.62	C
Drop 1	3-Sep-13	4-Sep-13	HMU	162.554	13.59185	144.86257	10.77	G
Drop 1	4-Sep-13	4-Sep-13	MSA	163.358	13.59931	144.86976		C
Drop 1	4-Sep-13	4-Sep-13	MSA	163.327	13.59977	144.86949	53.34	C
Drop 1	4-Sep-13	4-Sep-13	MSA	163.339	13.60005	144.86937	30.46	C
Drop 1	4-Sep-13	4-Sep-13	MSA	162.430	13.60018	144.86936	13.04	C
Drop 1	4-Sep-13	4-Sep-13	MSA	163.530	13.59938	144.86968	86.16	C
Drop 1	4-Sep-13	4-Sep-13	MSA	163.565	13.59943	144.86969	5.10	C
Drop 1	4-Sep-13	N/D	MSA	162.470	N/A	N/A	N/A	N/A
Drop 1	4-Sep-13	4-Sep-13	MSA	163.230	N/A	N/A	N/A	N/A

	Flagger and Bait Location Data							
Bait Drop Session	**Date Flagger Deployed**	**Date Flagger Located**	**Site**	**Radio Freq.**	**UTM N**	**UTM E**	**Distance Between Flaggers (M)**	**Canopy Or Ground**
Drop 1	4-Sep-13	4-Sep-13	MSA	162.422	13.59990	144.86948		C
Drop 1	4-Sep-13	4-Sep-13	MSA	162.489	13.60001	144.86943	12.08	G
Drop 2	30-Sep-13	30-Sep-13	HMU	162.390	13.59710	144.86534		C
Drop 2	30-Sep-13	1-Oct-13	HMU	162.404	13.59657	144.86559	58.60	G
Drop 2	30-Sep-13	1-Oct-13	HMU	162.429	13.59686	144.86546	31.78	C
Drop 2	30-Sep-13	30-Sep-13	HMU	162.454	13.59680	144.86549	6.71	C
Drop 2	30-Sep-13	1-Oct-13	HMU	162.460	13.59634	144.86568	49.77	C
Drop 2	30-Sep-13	1-Oct-13	HMU	162.480	13.59629	144.86572	6.40	C
Drop 2	30-Sep-13	2-Oct-13	HMU	162.510	13.59629	144.86571	1.00	C
Drop 2	30-Sep-13	2-Oct-13	HMU	162.570	13.59619	144.86578	12.21	C
Drop 2	30-Sep-13	2-Oct-13	HMU	162.605	13.59604	144.86584	16.16	C
Drop 2	30-Sep-13	2-Oct-13	HMU	162.610	13.59590	144.86591	15.65	C
Drop 2	1-Oct-13	1-Oct-13	MSA	163.239	13.59841	144.87196		C
Drop 2	1-Oct-13	1-Oct-13	MSA	163.270	13.59841	144.87201	5.00	C
Drop 2	1-Oct-13	1-Oct-13	MSA	163.378	13.59857	144.87193	17.89	C
Drop 2	1-Oct-13	1-Oct-13	MSA	163.380	13.59875	144.87181	21.63	C
Drop 2	1-Oct-13	1-Oct-13	MSA	163.330	13.59883	144.87186	9.43	G
Drop 2	1-Oct-13	1-Oct-13	MSA	163.355	13.59908	144.87169	30.23	G
Drop 2	1-Oct-13	1-Oct-13	MSA	163.390	13.59904	144.87177	8.94	G
Drop 2	1-Oct-13	1-Oct-13	MSA	163.280	13.59926	144.87160	27.80	G
Drop 2	1-Oct-13	1-Oct-13	MSA	163.370	13.59909	144.87170	19.72	C

	Flagger and Bait Location Data							
Bait Drop Session	**Date Flagger Deployed**	**Date Flagger Located**	**Site**	**Radio Freq.**	**UTM N**	**UTM E**	**Distance Between Flaggers (M)**	**Canopy Or Ground**
Drop 2	1-Oct-13	1-Oct-13	MSA	163.605	13.59949	144.87141	49.41	G
Drop 3	15-Oct-13	15-Oct-13	HMU	162.444	13.59637	144.86333		C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.530	13.59637	144.86331	2.00	N/A
Drop 3	15-Oct-13	15-Oct-13	HMU	162.550	13.59662	144.86314	30.23	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.404	13.59668	144.86313	6.08	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.590	13.59681	144.86314	13.04	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.429	13.59696	144.86308	16.16	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.489	13.59713	144.86293	22.67	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.540	13.59728	144.86288	15.81	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.422	13.59741	144.86276	17.69	C
Drop 3	15-Oct-13	15-Oct-13	HMU	162.579	13.59744	144.86275	3.16	C
Drop 4	2-Dec-13	3-Dec-13	HMU	162.579	13.35536	144.52073		G
Drop 4	2-Dec-13	2-Dec-13	HMU	162.550	13.35543	144.52064	11.40	C
Drop 4	2-Dec-13	3-Dec-13	HMU	162.440	13.35546	144.52062	3.61	C
Drop 4	2-Dec-13	3-Dec-13	HMU	162.590	13.35553	144.52067	8.60	G
Drop 4	2-Dec-13	3-Dec-13	HMU	162.530	13.35556	144.52055	12.37	N/A
Drop 4	2-Dec-13	3-Dec-13	HMU	162.444	13.35567	144.52047	13.60	C
Drop 4	2-Dec-13	2-Dec-13	HMU	162.429	13.35572	144.52051	6.40	C
Drop 4	2-Dec-13	2-Dec-13	HMU	162.610	13.35586	144.52042	16.64	C
Drop 4	2-Dec-13	2-Dec-13	HMU	162.489	13.35591	144.5204	5.39	C
Drop 4	2-Dec-13	2-Dec-13	HMU	162.540	13.35594	144.52036	5.00	C

	Flagger and Bait Location Data							
Bait Drop Session	**Date Flagger Deployed**	**Date Flagger Located**	**Site**	**Radio Freq.**	**UTM N**	**UTM E**	**Distance Between Flaggers (M)**	**Canopy Or Ground**
Drop 4	3-Dec-13	3-Dec-13	MSA	163.378	13.36059	144.52242		C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.370	13.36056	144.52245	4.24	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.358	13.36037	144.5225	19.65	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.255	13.36046	144.52252	9.22	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.605	13.36036	144.52256	10.77	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.530	13.36037	144.52256	1.00	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.239	13.3603	144.52251	8.60	G
Drop 4	3-Dec-13	3-Dec-13	MSA	163.280	13.36031	144.52263	12.04	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.339	13.36024	144.52254	11.40	C
Drop 4	3-Dec-13	3-Dec-13	MSA	163.259	13.36024	144.52259	5.00	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.414	13.59588	144.86365		C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.430	13.59591	144.86359	6.71	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.454	13.59594	144.86356	4.24	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.460	13.59610	144.86337	24.84	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.510	13.59620	144.86330	12.21	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.522	13.59635	144.86325	15.81	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.530	13.59640	144.86327	5.39	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.554	13.59654	144.86325	14.14	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.580	13.59668	144.86317	16.12	C
Drop 5	13-Jan-14	13-Jan-14	HMU	162.590	13.59678	144.86319	10.20	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.230	13.59643	144.87057		C

	Flagger and Bait Location Data							
Bait Drop Session	**Date Flagger Deployed**	**Date Flagger Located**	**Site**	**Radio Freq.**	**UTM N**	**UTM E**	**Distance Between Flaggers (M)**	**Canopy Or Ground**
Drop 5	14-Jan-14	14-Jan-14	MSA	163.259	13.59635	144.87073	17.89	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.270	13.59672	144.87048	44.65	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.280	13.59668	144.87056	8.94	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.330	13.59703	144.87041	38.08	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.358	13.59700	144.87041	3.00	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.370	13.59732	144.87029	34.18	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.380	13.59720	144.87033	12.65	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.390	13.59770	144.87010	55.04	C
Drop 5	14-Jan-14	14-Jan-14	MSA	163.605	13.59752	144.87016	18.97	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.504	13.59879	144.86472		C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.580	13.59869	144.86473	10.05	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.554	13.59854	144.86475	15.13	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.522	13.59843	144.86482	13.04	G
Drop 6	15-Oct-14	15-Oct-14	HMU	162.605	13.59817	144.86496	29.53	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.440	13.59802	144.86499	15.30	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.430	13.59794	144.86511	14.42	G
Drop 6	15-Oct-14	15-Oct-14	HMU	162.414	13.59784	144.86514	10.44	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.380	13.59767	144.86520	18.03	C
Drop 6	15-Oct-14	15-Oct-14	HMU	162.489	13.59756	144.86520	11.00	C
Drop 6	16-Oct-14	16-Oct-14	MSA	163.255	13.59646	144.87329		C
Drop 6	16-Oct-14	16-Oct-14	MSA	163.355	13.59583	144.87357	68.94	N/A

	Flagger and Bait Location Data							
Bait Drop Session	**Date Flagger Deployed**	**Date Flagger Located**	**Site**	**Radio Freq.**	**UTM N**	**UTM E**	**Distance Between Flaggers (M)**	**Canopy Or Ground**
Drop 6	16-Oct-14	16-Oct-14	MSA	163.380	13.59607	144.87354	24.19	C
Drop 6	16-Oct-14	16-Oct-14	MSA	163.390	13.59603	144.87347	8.06	G
Drop 6	16-Oct-14	16-Oct-14	MSA	162.429	13.59577	144.87372	36.07	G
Drop 6	16-Oct-14	16-Oct-14	MSA	162.444	13.59554	144.87379	24.04	C
Drop 6	16-Oct-14	16-Oct-14	MSA	162.540	13.59531	144.87392	26.42	C
Drop 6	16-Oct-14	16-Oct-14	MSA	162.550	13.59518	144.87396	13.60	C
Drop 6	16-Oct-14	16-Oct-14	MSA	162.571	13.59500	144.87415	26.17	C
Drop 6	16-Oct-14	16-Oct-14	MSA	163.259	13.59479	144.87410	21.59	G

Appendix C: Bait station monitoring data of non-toxic baits placed on randomly selected transects within monitoring sites (Site, Quadrant and Transect) and used to provide an index of brown tree snake abundance associated with aerial toxicant bait drops. Bait status was either present (P) or absent (A) numeric take was used to calculate bait take rate on each transect for each monitoring session. The drop period represents the period on which aerial toxicant bait drops occurred (See Figure 13).

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1	1	HMU	1	6	1	0	A	1
2	1	HMU	1	6	2	0	A	1
3	1	HMU	1	6	3	0	P	0
4	1	HMU	1	6	4	0	P	0
5	1	HMU	1	6	5	0	P	0
6	1	HMU	1	6	6	0	A	1
7	1	HMU	1	6	7	0	A	1
8	1	HMU	1	6	8	0	A	1
9	1	HMU	1	6	9	0	A	1
10	1	HMU	1	6	10	0	A	1
11	1	HMU	1	6	11	0	P	0
12	1	HMU	2	3	1	0	P	0
13	1	HMU	2	3	2	0	A	1
14	1	HMU	2	3	3	0	A	1
15	1	HMU	2	3	4	0	P	0
16	1	HMU	2	3	5	0	A	1
17	1	HMU	2	3	6	0	A	1
18	1	HMU	2	3	7	0	P	0
19	1	HMU	2	3	8	0	A	1
20	1	HMU	2	3	9	0	A	1
21	1	HMU	2	3	10	0	A	1
22	1	HMU	2	3	11	0	P	0
23	1	HMU	3	9	1	0	A	1
24	1	HMU	3	9	2	0	A	1
25	1	HMU	3	9	3	0	A	1
26	1	HMU	3	9	4	0	P	0
27	1	HMU	3	9	5	0	P	0
28	1	HMU	3	9	6	0	A	1
29	1	HMU	3	9	7	0	A	1
30	1	HMU	3	9	8	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
31	1	HMU	3	9	9	0	A	1
32	1	HMU	3	9	10	0	P	0
33	1	HMU	3	9	11	0	P	0
34	1	HMU	4	5	1	0	A	1
35	1	HMU	4	5	2	0	P	0
36	1	HMU	4	5	3	0	P	0
37	1	HMU	4	5	4	0	P	0
38	1	HMU	4	5	5	0	A	1
39	1	HMU	4	5	6	0	A	1
40	1	HMU	4	5	7	0	P	0
41	1	HMU	4	5	8	0	A	1
42	1	HMU	4	5	9	0	P	0
43	1	HMU	4	5	10	0	P	0
44	1	HMU	4	5	11	0	P	0
45	1	HMU	5	8	1	0	P	0
46	1	HMU	5	8	2	0	P	0
47	1	HMU	5	8	3	0	A	1
48	1	HMU	5	8	4	0	A	1
49	1	HMU	5	8	5	0	A	1
50	1	HMU	5	8	6	0	A	1
51	1	HMU	5	8	7	0	P	0
52	1	HMU	5	8	8	0	A	1
53	1	HMU	5	8	9	0	A	1
54	1	HMU	5	8	10	0	P	0
55	1	HMU	5	8	11	0	P	0
56	1	HMU	6	7	1	0	A	1
57	1	HMU	6	7	2	0	A	1
58	1	HMU	6	7	3	0	P	0
59	1	HMU	6	7	4	0	P	0
60	1	HMU	6	7	5	0	P	0
61	1	HMU	6	7	6	0	P	0
62	1	HMU	6	7	7	0	P	0
63	1	HMU	6	7	8	0	P	0
64	1	HMU	6	7	9	0	A	1
65	1	HMU	6	7	10	0	P	0
66	1	HMU	6	7	11	0	A	1
67	1	MSA	1	6	1	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
68	1	MSA	1	6	2	0	A	1
69	1	MSA	1	6	3	0	A	1
70	1	MSA	1	6	4	0	P	0
71	1	MSA	1	6	5	0	A	1
72	1	MSA	1	6	6	0	A	1
73	1	MSA	1	6	7	0	A	1
74	1	MSA	1	6	8	0	A	1
75	1	MSA	1	6	9	0	A	1
76	1	MSA	1	6	10	0	P	0
77	1	MSA	1	6	11	0	P	0
78	1	MSA	2	3	1	0	P	0
79	1	MSA	2	3	2	0	P	0
80	1	MSA	2	3	3	0	P	0
81	1	MSA	2	3	4	0	P	0
82	1	MSA	2	3	5	0	P	0
83	1	MSA	2	3	6	0	P	0
84	1	MSA	2	3	7	0	P	0
85	1	MSA	2	3	8	0	A	1
86	1	MSA	2	3	9	0	A	1
87	1	MSA	2	3	10	0	A	1
88	1	MSA	2	3	11	0	P	0
89	1	MSA	3	9	1	0	P	0
90	1	MSA	3	9	2	0	P	0
91	1	MSA	3	9	3	0	A	1
92	1	MSA	3	9	4	0	A	1
93	1	MSA	3	9	5	0	P	0
94	1	MSA	3	9	6	0	P	0
95	1	MSA	3	9	7	0	A	1
96	1	MSA	3	9	8	0	A	1
97	1	MSA	3	9	9	0	A	1
98	1	MSA	3	9	10	0	A	1
99	1	MSA	3	9	11	0	P	0
100	1	MSA	4	5	1	0	A	1
101	1	MSA	4	5	2	0	A	1
102	1	MSA	4	5	3	0	P	0
103	1	MSA	4	5	4	0	A	1
104	1	MSA	4	5	5	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
105	1	MSA	4	5	6	0	A	1
106	1	MSA	4	5	7	0	P	0
107	1	MSA	4	5	8	0	P	0
108	1	MSA	4	5	9	0	A	1
109	1	MSA	4	5	10	0	A	1
110	1	MSA	4	5	11	0	A	1
111	1	MSA	5	8	1	0	A	1
112	1	MSA	5	8	2	0	P	0
113	1	MSA	5	8	3	0	P	0
114	1	MSA	5	8	4	0	P	0
115	1	MSA	5	8	5	0	A	1
116	1	MSA	5	8	6	0	A	1
117	1	MSA	5	8	7	0	P	0
118	1	MSA	5	8	8	0	P	0
119	1	MSA	5	8	9	0	A	1
120	1	MSA	5	8	10	0	P	0
121	1	MSA	5	8	11	0	P	0
122	1	MSA	6	7	1	0	A	1
123	1	MSA	6	7	2	0	P	0
124	1	MSA	6	7	3	0	A	1
125	1	MSA	6	7	4	0	P	0
126	1	MSA	6	7	5	0	P	0
127	1	MSA	6	7	6	0	P	0
128	1	MSA	6	7	7	0	A	1
129	1	MSA	6	7	8	0	A	1
130	1	MSA	6	7	9	0	P	0
131	1	MSA	6	7	10	0	P	0
132	1	MSA	6	7	11	0	P	0
133	1	REF	1	6	1	0	A	1
134	1	REF	1	6	2	0	P	0
135	1	REF	1	6	3	0	P	0
136	1	REF	1	6	4	0	P	0
137	1	REF	1	6	5	0	P	0
138	1	REF	1	6	6	0	P	0
139	1	REF	1	6	7	0	A	1
140	1	REF	1	6	8	0	P	0
141	1	REF	1	6	9	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
142	1	REF	1	6	10	0	A	1
143	1	REF	1	6	11	0	A	1
144	1	REF	2	3	1	0	P	0
145	1	REF	2	3	2	0	P	0
146	1	REF	2	3	3	0	P	0
147	1	REF	2	3	4	0	P	0
148	1	REF	2	3	5	0	A	1
149	1	REF	2	3	6	0	P	0
150	1	REF	2	3	7	0	A	1
151	1	REF	2	3	8	0	A	1
152	1	REF	2	3	9	0	A	1
153	1	REF	2	3	10	0	A	1
154	1	REF	2	3	11	0	A	1
155	1	REF	3	9	1	0	P	0
156	1	REF	3	9	2	0	A	1
157	1	REF	3	9	3	0	P	0
158	1	REF	3	9	4	0	A	1
159	1	REF	3	9	5	0	P	0
160	1	REF	3	9	6	0	P	0
161	1	REF	3	9	7	0	P	0
162	1	REF	3	9	8	0	P	0
163	1	REF	3	9	9	0	A	1
164	1	REF	3	9	10	0	A	1
165	1	REF	3	9	11	0	P	0
166	1	REF	4	5	1	0	A	1
167	1	REF	4	5	2	0	A	1
168	1	REF	4	5	3	0	A	1
169	1	REF	4	5	4	0	A	1
170	1	REF	4	5	5	0	A	1
171	1	REF	4	5	6	0	A	1
172	1	REF	4	5	7	0	P	0
173	1	REF	4	5	8	0	P	0
174	1	REF	4	5	9	0	A	1
175	1	REF	4	5	10	0	A	1
176	1	REF	4	5	11	0	A	1
177	1	REF	5	8	1	0	P	0
178	1	REF	5	8	2	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
179	1	REF	5	8	3	0	P	0
180	1	REF	5	8	4	0	P	0
181	1	REF	5	8	5	0	P	0
182	1	REF	5	8	6	0	A	1
183	1	REF	5	8	7	0	P	0
184	1	REF	5	8	8	0	P	0
185	1	REF	5	8	9	0	P	0
186	1	REF	5	8	10	0	P	0
187	1	REF	5	8	11	0	P	0
188	1	REF	6	7	1	0	P	0
189	1	REF	6	7	2	0	P	0
190	1	REF	6	7	3	0	A	1
191	1	REF	6	7	4	0	P	0
192	1	REF	6	7	5	0	A	1
193	1	REF	6	7	6	0	P	0
194	1	REF	6	7	7	0	A	1
195	1	REF	6	7	8	0	A	1
196	1	REF	6	7	9	0	A	1
197	1	REF	6	7	10	0	A	1
198	1	REF	6	7	11	0	A	1
199	2	HMU	1	2	1	0	A	1
200	2	HMU	1	2	2	0	A	1
201	2	HMU	1	2	3	0	A	1
202	2	HMU	1	2	4	0	P	0
203	2	HMU	1	2	5	0	A	1
204	2	HMU	1	2	6	0	A	1
205	2	HMU	1	2	7	0	A	1
206	2	HMU	1	2	8	0	A	1
207	2	HMU	1	2	9	0	A	1
208	2	HMU	1	2	10	0	P	0
209	2	HMU	1	2	11	0	A	1
210	2	HMU	2	8	1	0	A	1
211	2	HMU	2	8	2	0	P	0
212	2	HMU	2	8	3	0	P	0
213	2	HMU	2	8	4	0	P	0
214	2	HMU	2	8	5	0	A	1
215	2	HMU	2	8	6	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
216	2	HMU	2	8	7	0	P	0
217	2	HMU	2	8	8	0	P	0
218	2	HMU	2	8	9	0	A	1
219	2	HMU	2	8	10	0	A	1
220	2	HMU	2	8	11	0	A	1
221	2	HMU	3	3	1	0	P	0
222	2	HMU	3	3	2	0	A	1
223	2	HMU	3	3	3	0	A	1
224	2	HMU	3	3	4	0	A	1
225	2	HMU	3	3	5	0	A	1
226	2	HMU	3	3	6	0	P	0
227	2	HMU	3	3	7	0	A	1
228	2	HMU	3	3	8	0	A	1
229	2	HMU	3	3	9	0	P	0
230	2	HMU	3	3	10	0	A	1
231	2	HMU	3	3	11	0	A	1
232	2	HMU	4	5	1	0	P	0
233	2	HMU	4	5	2	0	P	0
234	2	HMU	4	5	3	0	P	0
235	2	HMU	4	5	4	0	P	0
236	2	HMU	4	5	5	0	P	0
237	2	HMU	4	5	6	0	P	0
238	2	HMU	4	5	7	0	P	0
239	2	HMU	4	5	8	0	P	0
240	2	HMU	4	5	9	0	A	1
241	2	HMU	4	5	10	0	P	0
242	2	HMU	4	5	11	0	A	1
243	2	HMU	5	6	1	0	A	1
244	2	HMU	5	6	2	0	P	0
245	2	HMU	5	6	3	0	P	0
246	2	HMU	5	6	4	0	P	0
247	2	HMU	5	6	5	0	A	1
248	2	HMU	5	6	6	0	A	1
249	2	HMU	5	6	7	0	A	1
250	2	HMU	5	6	8	0	P	0
251	2	HMU	5	6	9	0	P	0
252	2	HMU	5	6	10	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
253	2	HMU	5	6	11	0	P	0
254	2	HMU	6	9	1	0	A	1
255	2	HMU	6	9	2	0	P	0
256	2	HMU	6	9	3	0	A	1
257	2	HMU	6	9	4	0	A	1
258	2	HMU	6	9	5	0	A	1
259	2	HMU	6	9	6	0	P	0
260	2	HMU	6	9	7	0	A	1
261	2	HMU	6	9	8	0	P	0
262	2	HMU	6	9	9	0	A	1
263	2	HMU	6	9	10	0	A	1
264	2	HMU	6	9	11	0	P	0
265	2	MSA	1	2	1	0	P	0
266	2	MSA	1	2	2	0	P	0
267	2	MSA	1	2	3	0	A	1
268	2	MSA	1	2	4	0	P	0
269	2	MSA	1	2	5	0	A	1
270	2	MSA	1	2	6	0	P	0
271	2	MSA	1	2	7	0	P	0
272	2	MSA	1	2	8	0	P	0
273	2	MSA	1	2	9	0	A	1
274	2	MSA	1	2	10	0	A	1
275	2	MSA	1	2	11	0	A	1
276	2	MSA	2	8	1	0	A	1
277	2	MSA	2	8	2	0	P	0
278	2	MSA	2	8	3	0	A	1
279	2	MSA	2	8	4	0	P	0
280	2	MSA	2	8	5	0	P	0
281	2	MSA	2	8	6	0	P	0
282	2	MSA	2	8	7	0	A	1
283	2	MSA	2	8	8	0	P	0
284	2	MSA	2	8	9	0	P	0
285	2	MSA	2	8	10	0	A	1
286	2	MSA	2	8	11	0	A	1
287	2	MSA	3	3	1	0	P	0
288	2	MSA	3	3	2	0	A	1
289	2	MSA	3	3	3	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
290	2	MSA	3	3	4	0	A	1
291	2	MSA	3	3	5	0	A	1
292	2	MSA	3	3	6	0	A	1
293	2	MSA	3	3	7	0	A	1
294	2	MSA	3	3	8	0	P	0
295	2	MSA	3	3	9	0	P	0
296	2	MSA	3	3	10	0	P	0
297	2	MSA	3	3	11	0	P	0
298	2	MSA	4	5	1	0	A	1
299	2	MSA	4	5	2	0	A	1
300	2	MSA	4	5	3	0	A	1
301	2	MSA	4	5	4	0	A	1
302	2	MSA	4	5	5	0	P	0
303	2	MSA	4	5	6	0	A	1
304	2	MSA	4	5	7	0	P	0
305	2	MSA	4	5	8	0	P	0
306	2	MSA	4	5	9	0	P	0
307	2	MSA	4	5	10	0	A	1
308	2	MSA	4	5	11	0	A	1
309	2	MSA	5	6	1	0	P	0
310	2	MSA	5	6	2	0	P	0
311	2	MSA	5	6	3	0	P	0
312	2	MSA	5	6	4	0	P	0
313	2	MSA	5	6	5	0	A	1
314	2	MSA	5	6	6	0	A	1
315	2	MSA	5	6	7	0	A	1
316	2	MSA	5	6	8	0	P	0
317	2	MSA	5	6	9	0	P	0
318	2	MSA	5	6	10	0	P	0
319	2	MSA	5	6	11	0	P	0
320	2	MSA	6	9	1	0	P	0
321	2	MSA	6	9	2	0	P	0
322	2	MSA	6	9	3	0	P	0
323	2	MSA	6	9	4	0	A	1
324	2	MSA	6	9	5	0	P	0
325	2	MSA	6	9	6	0	A	1
326	2	MSA	6	9	7	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
327	2	MSA	6	9	8	0	A	1
328	2	MSA	6	9	9	0	A	1
329	2	MSA	6	9	10	0	A	1
330	2	MSA	6	9	11	0	A	1
331	2	REF	1	2	1	0	P	0
332	2	REF	1	2	2	0	A	1
333	2	REF	1	2	3	0	P	0
334	2	REF	1	2	4	0	P	0
335	2	REF	1	2	5	0	P	0
336	2	REF	1	2	6	0	P	0
337	2	REF	1	2	7	0	P	0
338	2	REF	1	2	8	0	P	0
339	2	REF	1	2	9	0	P	0
340	2	REF	1	2	10	0	A	1
341	2	REF	1	2	11	0	A	1
342	2	REF	2	8	1	0	P	0
343	2	REF	2	8	2	0	P	0
344	2	REF	2	8	3	0	P	0
345	2	REF	2	8	4	0	P	0
346	2	REF	2	8	5	0	A	1
347	2	REF	2	8	6	0	P	0
348	2	REF	2	8	7	0	P	0
349	2	REF	2	8	8	0	P	0
350	2	REF	2	8	9	0	P	0
351	2	REF	2	8	10	0	A	1
352	2	REF	2	8	11	0	P	0
353	2	REF	3	3	1	0	P	0
354	2	REF	3	3	2	0	A	1
355	2	REF	3	3	3	0	P	0
356	2	REF	3	3	4	0	P	0
357	2	REF	3	3	5	0	A	1
358	2	REF	3	3	6	0	P	0
359	2	REF	3	3	7	0	P	0
360	2	REF	3	3	8	0	P	0
361	2	REF	3	3	9	0	P	0
362	2	REF	3	3	10	0	A	1
363	2	REF	3	3	11	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
364	2	REF	4	5	1	0	A	1
365	2	REF	4	5	2	0	A	1
366	2	REF	4	5	3	0	P	0
367	2	REF	4	5	4	0	A	1
368	2	REF	4	5	5	0	A	1
369	2	REF	4	5	6	0	P	0
370	2	REF	4	5	7	0	P	0
371	2	REF	4	5	8	0	A	1
372	2	REF	4	5	9	0	P	0
373	2	REF	4	5	10	0	A	1
374	2	REF	4	5	11	0	A	1
375	2	REF	5	6	1	0	P	0
376	2	REF	5	6	2	0	P	0
377	2	REF	5	6	3	0	A	1
378	2	REF	5	6	4	0	A	1
379	2	REF	5	6	5	0	P	0
380	2	REF	5	6	6	0	P	0
381	2	REF	5	6	7	0	A	1
382	2	REF	5	6	8	0	A	1
383	2	REF	5	6	9	0	P	0
384	2	REF	5	6	10	0	P	0
385	2	REF	5	6	11	0	P	0
386	2	REF	6	9	1	0	A	1
387	2	REF	6	9	2	0	P	0
388	2	REF	6	9	3	0	P	0
389	2	REF	6	9	4	0	P	0
390	2	REF	6	9	5	0	P	0
391	2	REF	6	9	6	0	P	0
392	2	REF	6	9	7	0	A	1
393	2	REF	6	9	8	0	P	0
394	2	REF	6	9	9	0	P	0
395	2	REF	6	9	10	0	P	0
396	2	REF	6	9	11	0	P	0
397	3	HMU	5	8	1	0	P	0
398	3	HMU	5	8	2	0	A	1
399	3	HMU	5	8	3	0	A	1
400	3	HMU	5	8	4	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
401	3	HMU	5	8	5	0	A	1
402	3	HMU	5	8	6	0	A	1
403	3	HMU	5	8	7	0	P	0
404	3	HMU	5	8	8	0	A	1
405	3	HMU	5	8	9	0	A	1
406	3	HMU	5	8	10	0	A	1
407	3	HMU	5	8	11	0	A	1
408	3	HMU	6	3	1	0	A	1
409	3	HMU	6	3	2	0	A	1
410	3	HMU	6	3	3	0	A	1
411	3	HMU	6	3	4	0	P	0
412	3	HMU	6	3	5	0	A	1
413	3	HMU	6	3	6	0	A	1
414	3	HMU	6	3	7	0	P	0
415	3	HMU	6	3	8	0	P	0
416	3	HMU	6	3	9	0	A	1
417	3	HMU	6	3	10	0	P	0
418	3	HMU	6	3	11	0	P	0
419	3	HMU	3	1	1	0	A	1
420	3	HMU	3	1	2	0	P	0
421	3	HMU	3	1	3	0	P	0
422	3	HMU	3	1	4	0	P	0
423	3	HMU	3	1	5	0	A	1
424	3	HMU	3	1	6	0	A	1
425	3	HMU	3	1	7	0	A	1
426	3	HMU	3	1	8	0	P	0
427	3	HMU	3	1	9	0	P	0
428	3	HMU	3	1	10	0	P	0
429	3	HMU	3	1	11	0	P	0
430	3	HMU	1	6	1	0	A	1
431	3	HMU	1	6	2	0	A	1
432	3	HMU	1	6	3	0	A	1
433	3	HMU	1	6	4	0	A	1
434	3	HMU	1	6	5	0	A	1
435	3	HMU	1	6	6	0	P	0
436	3	HMU	1	6	7	0	P	0
437	3	HMU	1	6	8	0	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
438	3	HMU	1	6	9	0	A	1
439	3	HMU	1	6	10	0	A	1
440	3	HMU	1	6	11	0	A	1
441	3	HMU	2	4	1	0	P	0
442	3	HMU	2	4	2	0	P	0
443	3	HMU	2	4	3	0	A	1
444	3	HMU	2	4	4	0	A	1
445	3	HMU	2	4	5	0	P	0
446	3	HMU	2	4	6	0	P	0
447	3	HMU	2	4	7	0	A	1
448	3	HMU	2	4	8	0	P	0
449	3	HMU	2	4	9	0	P	0
450	3	HMU	2	4	10	0	P	0
451	3	HMU	2	4	11	0	A	1
452	3	HMU	4	9	1	0	P	0
453	3	HMU	4	9	2	0	A	1
454	3	HMU	4	9	3	0	A	1
455	3	HMU	4	9	4	0	A	1
456	3	HMU	4	9	5	0	A	1
457	3	HMU	4	9	6	0	P	0
458	3	HMU	4	9	7	0	A	1
459	3	HMU	4	9	8	0	A	1
460	3	HMU	4	9	9	0	P	0
461	3	HMU	4	9	10	0	A	1
462	3	HMU	4	9	11	0	A	1
463	3	MSA	3	1	1	0	P	0
464	3	MSA	3	1	2	0	P	0
465	3	MSA	3	1	3	0	P	0
466	3	MSA	3	1	4	0	A	1
467	3	MSA	3	1	5	0	A	1
468	3	MSA	3	1	6	0	A	1
469	3	MSA	3	1	7	0	P	0
470	3	MSA	3	1	8	0	A	1
471	3	MSA	3	1	9	0	P	0
472	3	MSA	3	1	10	0	P	0
473	3	MSA	3	1	11	0	P	0
474	3	MSA	2	4	1	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
475	3	MSA	2	4	2	0	A	1
476	3	MSA	2	4	3	0	P	0
477	3	MSA	2	4	4	0	A	1
478	3	MSA	2	4	5	0	A	1
479	3	MSA	2	4	6	0	A	1
480	3	MSA	2	4	7	0	A	1
481	3	MSA	2	4	8	0	P	0
482	3	MSA	2	4	9	0	A	1
483	3	MSA	2	4	10	0	P	0
484	3	MSA	2	4	11	0	A	1
485	3	MSA	5	8	1	0	P	0
486	3	MSA	5	8	2	0	P	0
487	3	MSA	5	8	3	0	A	1
488	3	MSA	5	8	4	0	P	0
489	3	MSA	5	8	5	0	P	0
490	3	MSA	5	8	6	0	P	0
491	3	MSA	5	8	7	0	A	1
492	3	MSA	5	8	8	0	A	1
493	3	MSA	5	8	9	0	A	1
494	3	MSA	5	8	10	0	A	1
495	3	MSA	5	8	11	0	A	1
496	3	MSA	6	3	1	0	P	0
497	3	MSA	6	3	2	0	P	0
498	3	MSA	6	3	3	0	A	1
499	3	MSA	6	3	4	0	A	1
500	3	MSA	6	3	5	0	P	0
501	3	MSA	6	3	6	0	A	1
502	3	MSA	6	3	7	0	A	1
503	3	MSA	6	3	8	0	P	0
504	3	MSA	6	3	9	0	A	1
505	3	MSA	6	3	10	0	A	1
506	3	MSA	6	3	11	0	A	1
507	3	MSA	1	6	1	0	A	1
508	3	MSA	1	6	2	0	A	1
509	3	MSA	1	6	3	0	P	0
510	3	MSA	1	6	4	0	P	0
511	3	MSA	1	6	5	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
512	3	MSA	1	6	6	0	A	1
513	3	MSA	1	6	7	0	P	0
514	3	MSA	1	6	8	0	A	1
515	3	MSA	1	6	9	0	A	1
516	3	MSA	1	6	10	0	P	0
517	3	MSA	1	6	11	0	P	0
518	3	MSA	4	9	1	0	A	1
519	3	MSA	4	9	2	0	A	1
520	3	MSA	4	9	3	0	P	0
521	3	MSA	4	9	4	0	P	0
522	3	MSA	4	9	5	0	A	1
523	3	MSA	4	9	6	0	A	1
524	3	MSA	4	9	7	0	A	1
525	3	MSA	4	9	8	0	P	0
526	3	MSA	4	9	9	0	P	0
527	3	MSA	4	9	10	0	P	0
528	3	MSA	4	9	11	0	P	0
529	3	REF	2	4	1	0	A	1
530	3	REF	2	4	2	0	A	1
531	3	REF	2	4	3	0	A	1
532	3	REF	2	4	4	0	P	0
533	3	REF	2	4	5	0	P	0
534	3	REF	2	4	6	0	A	1
535	3	REF	2	4	7	0	P	0
536	3	REF	2	4	8	0	A	1
537	3	REF	2	4	9	0	P	0
538	3	REF	2	4	10	0	P	0
539	3	REF	2	4	11	0	P	0
540	3	REF	4	9	1	0	P	0
541	3	REF	4	9	2	0	P	0
542	3	REF	4	9	3	0	P	0
543	3	REF	4	9	4	0	P	0
544	3	REF	4	9	5	0	P	0
545	3	REF	4	9	6	0	P	0
546	3	REF	4	9	7	0	A	1
547	3	REF	4	9	8	0	A	1
548	3	REF	4	9	9	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
549	3	REF	4	9	10	0	P	0
550	3	REF	4	9	11	0	P	0
551	3	REF	6	3	1	0	P	0
552	3	REF	6	3	2	0	A	1
553	3	REF	6	3	3	0	P	0
554	3	REF	6	3	4	0	P	0
555	3	REF	6	3	5	0	A	1
556	3	REF	6	3	6	0	A	1
557	3	REF	6	3	7	0	A	1
558	3	REF	6	3	8	0	A	1
559	3	REF	6	3	9	0	A	1
560	3	REF	6	3	10	0	P	0
561	3	REF	6	3	11	0	P	0
562	3	REF	1	6	1	0	A	1
563	3	REF	1	6	2	0	A	1
564	3	REF	1	6	3	0	P	0
565	3	REF	1	6	4	0	P	0
566	3	REF	1	6	5	0	A	1
567	3	REF	1	6	6	0	P	0
568	3	REF	1	6	7	0	P	0
569	3	REF	1	6	8	0	P	0
570	3	REF	1	6	9	0	A	1
571	3	REF	1	6	10	0	A	1
572	3	REF	1	6	11	0	A	1
573	3	REF	5	8	1	0	A	1
574	3	REF	5	8	2	0	A	1
575	3	REF	5	8	3	0	P	0
576	3	REF	5	8	4	0	P	0
577	3	REF	5	8	5	0	A	1
578	3	REF	5	8	6	0	P	0
579	3	REF	5	8	7	0	P	0
580	3	REF	5	8	8	0	P	0
581	3	REF	5	8	9	0	P	0
582	3	REF	5	8	10	0	P	0
583	3	REF	5	8	11	0	P	0
584	3	REF	3	1	1	0	P	0
585	3	REF	3	1	2	0	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
586	3	REF	3	1	3	0	P	0
587	3	REF	3	1	4	0	A	1
588	3	REF	3	1	5	0	P	0
589	3	REF	3	1	6	0	A	1
590	3	REF	3	1	7	0	P	0
591	3	REF	3	1	8	0	P	0
592	3	REF	3	1	9	0	A	1
593	3	REF	3	1	10	0	A	1
594	3	REF	3	1	11	0	P	0
595	4	HMU	1	6	1	1	A	1
596	4	HMU	1	6	2	1	P	0
597	4	HMU	1	6	3	1	P	0
598	4	HMU	1	6	4	1	P	0
599	4	HMU	1	6	5	1	P	0
600	4	HMU	1	6	6	1	P	0
601	4	HMU	1	6	7	1	P	0
602	4	HMU	1	6	8	1	P	0
603	4	HMU	1	6	9	1	P	0
604	4	HMU	1	6	10	1	P	0
605	4	HMU	1	6	11	1	P	0
606	4	HMU	2	3	1	1	P	0
607	4	HMU	2	3	2	1	P	0
608	4	HMU	2	3	3	1	A	1
609	4	HMU	2	3	4	1	A	1
610	4	HMU	2	3	5	1	A	1
611	4	HMU	2	3	6	1	P	0
612	4	HMU	2	3	7	1	P	0
613	4	HMU	2	3	8	1	P	0
614	4	HMU	2	3	9	1	P	0
615	4	HMU	2	3	10	1	P	0
616	4	HMU	2	3	11	1	P	0
617	4	HMU	3	2	1	1	A	1
618	4	HMU	3	2	2	1	P	0
619	4	HMU	3	2	3	1	P	0
620	4	HMU	3	2	4	1	P	0
621	4	HMU	3	2	5	1	P	0
622	4	HMU	3	2	6	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
623	4	HMU	3	2	7	1	P	0
624	4	HMU	3	2	8	1	P	0
625	4	HMU	3	2	9	1	P	0
626	4	HMU	3	2	10	1	P	0
627	4	HMU	3	2	11	1	A	1
628	4	HMU	4	2	1	1	P	0
629	4	HMU	4	2	2	1	P	0
630	4	HMU	4	2	3	1	P	0
631	4	HMU	4	2	4	1	P	0
632	4	HMU	4	2	5	1	P	0
633	4	HMU	4	2	6	1	P	0
634	4	HMU	4	2	7	1	P	0
635	4	HMU	4	2	8	1	A	1
636	4	HMU	4	2	9	1	P	0
637	4	HMU	4	2	10	1	P	0
638	4	HMU	4	2	11	1	P	0
639	4	HMU	5	4	1	1	P	0
640	4	HMU	5	4	2	1	P	0
641	4	HMU	5	4	3	1	P	0
642	4	HMU	5	4	4	1	P	0
643	4	HMU	5	4	5	1	P	0
644	4	HMU	5	4	6	1	P	0
645	4	HMU	5	4	7	1	P	0
646	4	HMU	5	4	8	1	P	0
647	4	HMU	5	4	9	1	A	1
648	4	HMU	5	4	10	1	P	0
649	4	HMU	5	4	11	1	P	0
650	4	HMU	6	3	1	1	A	1
651	4	HMU	6	3	2	1	P	0
652	4	HMU	6	3	3	1	P	0
653	4	HMU	6	3	4	1	P	0
654	4	HMU	6	3	5	1	A	1
655	4	HMU	6	3	6	1	A	1
656	4	HMU	6	3	7	1	P	0
657	4	HMU	6	3	8	1	P	0
658	4	HMU	6	3	9	1	A	1
659	4	HMU	6	3	10	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
660	4	HMU	6	3	11	1	P	0
661	4	MSA	1	6	1	1	A	1
662	4	MSA	1	6	2	1	A	1
663	4	MSA	1	6	3	1	P	0
664	4	MSA	1	6	4	1	A	1
665	4	MSA	1	6	5	1	P	0
666	4	MSA	1	6	6	1	A	1
667	4	MSA	1	6	7	1	P	0
668	4	MSA	1	6	8	1	P	0
669	4	MSA	1	6	9	1	P	0
670	4	MSA	1	6	10	1	P	0
671	4	MSA	1	6	11	1	A	1
672	4	MSA	2	3	1	1	A	1
673	4	MSA	2	3	2	1	A	1
674	4	MSA	2	3	3	1	P	0
675	4	MSA	2	3	4	1	P	0
676	4	MSA	2	3	5	1	A	1
677	4	MSA	2	3	6	1	P	0
678	4	MSA	2	3	7	1	P	0
679	4	MSA	2	3	8	1	A	1
680	4	MSA	2	3	9	1	P	0
681	4	MSA	2	3	10	1	A	1
682	4	MSA	2	3	11	1	P	0
683	4	MSA	3	2	1	1	P	0
684	4	MSA	3	2	2	1	P	0
685	4	MSA	3	2	3	1	P	0
686	4	MSA	3	2	4	1	P	0
687	4	MSA	3	2	5	1	A	1
688	4	MSA	3	2	6	1	A	1
689	4	MSA	3	2	7	1	P	0
690	4	MSA	3	2	8	1	P	0
691	4	MSA	3	2	9	1	P	0
692	4	MSA	3	2	10	1	P	0
693	4	MSA	3	2	11	1	P	0
694	4	MSA	4	2	1	1	P	0
695	4	MSA	4	2	2	1	P	0
696	4	MSA	4	2	3	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
697	4	MSA	4	2	4	1	A	1
698	4	MSA	4	2	5	1	A	1
699	4	MSA	4	2	6	1	P	0
700	4	MSA	4	2	7	1	P	0
701	4	MSA	4	2	8	1	P	0
702	4	MSA	4	2	9	1	P	0
703	4	MSA	4	2	10	1	P	0
704	4	MSA	4	2	11	1	A	1
705	4	MSA	5	4	1	1	P	0
706	4	MSA	5	4	2	1	P	0
707	4	MSA	5	4	3	1	P	0
708	4	MSA	5	4	4	1	P	0
709	4	MSA	5	4	5	1	P	0
710	4	MSA	5	4	6	1	P	0
711	4	MSA	5	4	7	1	P	0
712	4	MSA	5	4	8	1	P	0
713	4	MSA	5	4	9	1	P	0
714	4	MSA	5	4	10	1	A	1
715	4	MSA	5	4	11	1	P	0
716	4	MSA	6	3	1	1	P	0
717	4	MSA	6	3	2	1	P	0
718	4	MSA	6	3	3	1	A	1
719	4	MSA	6	3	4	1	P	0
720	4	MSA	6	3	5	1	P	0
721	4	MSA	6	3	6	1	P	0
722	4	MSA	6	3	7	1	P	0
723	4	MSA	6	3	8	1	P	0
724	4	MSA	6	3	9	1	P	0
725	4	MSA	6	3	10	1	P	0
726	4	MSA	6	3	11	1	P	0
727	4	REF	2	3	1	1	A	1
728	4	REF	2	3	2	1	P	0
729	4	REF	2	3	3	1	P	0
730	4	REF	2	3	4	1	P	0
731	4	REF	2	3	5	1	A	1
732	4	REF	2	3	6	1	A	1
733	4	REF	2	3	7	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
734	4	REF	2	3	8	1	A	1
735	4	REF	2	3	9	1	P	0
736	4	REF	2	3	10	1	A	1
737	4	REF	2	3	11	1	A	1
738	4	REF	1	6	1	1	P	0
739	4	REF	1	6	2	1	P	0
740	4	REF	1	6	3	1	A	1
741	4	REF	1	6	4	1	A	1
742	4	REF	1	6	5	1	P	0
743	4	REF	1	6	6	1	P	0
744	4	REF	1	6	7	1	P	0
745	4	REF	1	6	8	1	P	0
746	4	REF	1	6	9	1	P	0
747	4	REF	1	6	10	1	A	1
748	4	REF	1	6	11	1	P	0
749	4	REF	4	2	1	1	A	1
750	4	REF	4	2	2	1	P	0
751	4	REF	4	2	3	1	P	0
752	4	REF	4	2	4	1	A	1
753	4	REF	4	2	5	1	P	0
754	4	REF	4	2	6	1	P	0
755	4	REF	4	2	7	1	P	0
756	4	REF	4	2	8	1	P	0
757	4	REF	4	2	9	1	P	0
758	4	REF	4	2	10	1	A	1
759	4	REF	4	2	11	1	P	0
760	4	REF	3	2	1	1	P	0
761	4	REF	3	2	2	1	A	1
762	4	REF	3	2	3	1	P	0
763	4	REF	3	2	4	1	P	0
764	4	REF	3	2	5	1	P	0
765	4	REF	3	2	6	1	P	0
766	4	REF	3	2	7	1	P	0
767	4	REF	3	2	8	1	A	1
768	4	REF	3	2	9	1	P	0
769	4	REF	3	2	10	1	A	1
770	4	REF	3	2	11	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
771	4	REF	5	4	1	1	A	1
772	4	REF	5	4	2	1	A	1
773	4	REF	5	4	3	1	P	0
774	4	REF	5	4	4	1	P	0
775	4	REF	5	4	5	1	P	0
776	4	REF	5	4	6	1	A	1
777	4	REF	5	4	7	1	P	0
778	4	REF	5	4	8	1	P	0
779	4	REF	5	4	9	1	P	0
780	4	REF	5	4	10	1	A	1
781	4	REF	5	4	11	1	P	0
782	4	REF	6	3	1	1	P	0
783	4	REF	6	3	2	1	P	0
784	4	REF	6	3	3	1	P	0
785	4	REF	6	3	4	1	A	1
786	4	REF	6	3	5	1	P	0
787	4	REF	6	3	6	1	P	0
788	4	REF	6	3	7	1	P	0
789	4	REF	6	3	8	1	A	1
790	4	REF	6	3	9	1	P	0
791	4	REF	6	3	10	1	P	0
792	4	REF	6	3	11	1	A	1
793	5	HMU	1	1	1	1	P	0
794	5	HMU	1	1	2	1	P	0
795	5	HMU	1	1	3	1	P	0
796	5	HMU	1	1	4	1	P	0
797	5	HMU	1	1	5	1	P	0
798	5	HMU	1	1	6	1	P	0
799	5	HMU	1	1	7	1	P	0
800	5	HMU	1	1	8	1	P	0
801	5	HMU	1	1	9	1	P	0
802	5	HMU	1	1	10	1	P	0
803	5	HMU	1	1	11	1	P	0
804	5	HMU	2	1	1	1	P	0
805	5	HMU	2	1	2	1	P	0
806	5	HMU	2	1	3	1	P	0
807	5	HMU	2	1	4	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
808	5	HMU	2	1	5	1	P	0
809	5	HMU	2	1	6	1	A	1
810	5	HMU	2	1	7	1	P	0
811	5	HMU	2	1	8	1	P	0
812	5	HMU	2	1	9	1	P	0
813	5	HMU	2	1	10	1	P	0
814	5	HMU	2	1	11	1	P	0
815	5	HMU	3	3	1	1	A	1
816	5	HMU	3	3	2	1	P	0
817	5	HMU	3	3	3	1	P	0
818	5	HMU	3	3	4	1	P	0
819	5	HMU	3	3	5	1	P	0
820	5	HMU	3	3	6	1	P	0
821	5	HMU	3	3	7	1	P	0
822	5	HMU	3	3	8	1	P	0
823	5	HMU	3	3	9	1	P	0
824	5	HMU	3	3	10	1	P	0
825	5	HMU	3	3	11	1	P	0
826	5	HMU	4	8	1	1	P	0
827	5	HMU	4	8	2	1	P	0
828	5	HMU	4	8	3	1	P	0
829	5	HMU	4	8	4	1	P	0
830	5	HMU	4	8	5	1	A	1
831	5	HMU	4	8	6	1	P	0
832	5	HMU	4	8	7	1	P	0
833	5	HMU	4	8	8	1	P	0
834	5	HMU	4	8	9	1	P	0
835	5	HMU	4	8	10	1	P	0
836	5	HMU	4	8	11	1	P	0
837	5	HMU	5	6	1	1	P	0
838	5	HMU	5	6	2	1	A	1
839	5	HMU	5	6	3	1	P	0
840	5	HMU	5	6	4	1	P	0
841	5	HMU	5	6	5	1	P	0
842	5	HMU	5	6	6	1	P	0
843	5	HMU	5	6	7	1	P	0
844	5	HMU	5	6	8	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
845	5	HMU	5	6	9	1	P	0
846	5	HMU	5	6	10	1	P	0
847	5	HMU	5	6	11	1	P	0
848	5	HMU	6	2	1	1	P	0
849	5	HMU	6	2	2	1	A	1
850	5	HMU	6	2	3	1	P	0
851	5	HMU	6	2	4	1	P	0
852	5	HMU	6	2	5	1	P	0
853	5	HMU	6	2	6	1	P	0
854	5	HMU	6	2	7	1	P	0
855	5	HMU	6	2	8	1	P	0
856	5	HMU	6	2	9	1	P	0
857	5	HMU	6	2	10	1	P	0
858	5	HMU	6	2	11	1	P	0
859	5	MSA	1	1	1	1	A	1
860	5	MSA	1	1	2	1	P	0
861	5	MSA	1	1	3	1	A	1
862	5	MSA	1	1	4	1	P	0
863	5	MSA	1	1	5	1	P	0
864	5	MSA	1	1	6	1	A	1
865	5	MSA	1	1	7	1	P	0
866	5	MSA	1	1	8	1	A	1
867	5	MSA	1	1	9	1	P	0
868	5	MSA	1	1	10	1	P	0
869	5	MSA	1	1	11	1	P	0
870	5	MSA	2	1	1	1	P	0
871	5	MSA	2	1	2	1	P	0
872	5	MSA	2	1	3	1	P	0
873	5	MSA	2	1	4	1	A	1
874	5	MSA	2	1	5	1	A	1
875	5	MSA	2	1	6	1	P	0
876	5	MSA	2	1	7	1	P	0
877	5	MSA	2	1	8	1	P	0
878	5	MSA	2	1	9	1	P	0
879	5	MSA	2	1	10	1	P	0
880	5	MSA	2	1	11	1	P	0
881	5	MSA	3	3	1	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
882	5	MSA	3	3	2	1	A	1
883	5	MSA	3	3	3	1	P	0
884	5	MSA	3	3	4	1	P	0
885	5	MSA	3	3	5	1	P	0
886	5	MSA	3	3	6	1	P	0
887	5	MSA	3	3	7	1	P	0
888	5	MSA	3	3	8	1	P	0
889	5	MSA	3	3	9	1	A	1
890	5	MSA	3	3	10	1	P	0
891	5	MSA	3	3	11	1	P	0
892	5	MSA	4	8	1	1	A	1
893	5	MSA	4	8	2	1	P	0
894	5	MSA	4	8	3	1	P	0
895	5	MSA	4	8	4	1	P	0
896	5	MSA	4	8	5	1	P	0
897	5	MSA	4	8	6	1	P	0
898	5	MSA	4	8	7	1	P	0
899	5	MSA	4	8	8	1	P	0
900	5	MSA	4	8	9	1	P	0
901	5	MSA	4	8	10	1	P	0
902	5	MSA	4	8	11	1	P	0
903	5	MSA	5	6	1	1	P	0
904	5	MSA	5	6	2	1	P	0
905	5	MSA	5	6	3	1	P	0
906	5	MSA	5	6	4	1	P	0
907	5	MSA	5	6	5	1	A	1
908	5	MSA	5	6	6	1	P	0
909	5	MSA	5	6	7	1	P	0
910	5	MSA	5	6	8	1	P	0
911	5	MSA	5	6	9	1	P	0
912	5	MSA	5	6	10	1	A	1
913	5	MSA	5	6	11	1	P	0
914	5	MSA	6	2	1	1	A	1
915	5	MSA	6	2	2	1	P	0
916	5	MSA	6	2	3	1	P	0
917	5	MSA	6	2	4	1	P	0
918	5	MSA	6	2	5	1	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
919	5	MSA	6	2	6	1	A	1
920	5	MSA	6	2	7	1	P	0
921	5	MSA	6	2	8	1	P	0
922	5	MSA	6	2	9	1	P	0
923	5	MSA	6	2	10	1	P	0
924	5	MSA	6	2	11	1	P	0
925	5	REF	1	1	1	1	A	1
926	5	REF	1	1	2	1	P	0
927	5	REF	1	1	3	1	P	0
928	5	REF	1	1	4	1	P	0
929	5	REF	1	1	5	1	P	0
930	5	REF	1	1	6	1	P	0
931	5	REF	1	1	7	1	P	0
932	5	REF	1	1	8	1	P	0
933	5	REF	1	1	9	1	P	0
934	5	REF	1	1	10	1	A	1
935	5	REF	1	1	11	1	A	1
936	5	REF	2	1	1	1	P	0
937	5	REF	2	1	2	1	A	1
938	5	REF	2	1	3	1	A	1
939	5	REF	2	1	4	1	A	1
940	5	REF	2	1	5	1	P	0
941	5	REF	2	1	6	1	P	0
942	5	REF	2	1	7	1	P	0
943	5	REF	2	1	8	1	A	1
944	5	REF	2	1	9	1	P	0
945	5	REF	2	1	10	1	P	0
946	5	REF	2	1	11	1	P	0
947	5	REF	3	3	1	1	P	0
948	5	REF	3	3	2	1	A	1
949	5	REF	3	3	3	1	P	0
950	5	REF	3	3	4	1	A	1
951	5	REF	3	3	5	1	A	1
952	5	REF	3	3	6	1	P	0
953	5	REF	3	3	7	1	P	0
954	5	REF	3	3	8	1	P	0
955	5	REF	3	3	9	1	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
956	5	REF	3	3	10	1	P	0
957	5	REF	3	3	11	1	P	0
958	5	REF	4	8	1	1	P	0
959	5	REF	4	8	2	1	P	0
960	5	REF	4	8	3	1	P	0
961	5	REF	4	8	4	1	P	0
962	5	REF	4	8	5	1	P	0
963	5	REF	4	8	6	1	P	0
964	5	REF	4	8	7	1	P	0
965	5	REF	4	8	8	1	A	1
966	5	REF	4	8	9	1	P	0
967	5	REF	4	8	10	1	P	0
968	5	REF	4	8	11	1	P	0
969	5	REF	5	6	1	1	P	0
970	5	REF	5	6	2	1	P	0
971	5	REF	5	6	3	1	P	0
972	5	REF	5	6	4	1	P	0
973	5	REF	5	6	5	1	P	0
974	5	REF	5	6	6	1	P	0
975	5	REF	5	6	7	1	P	0
976	5	REF	5	6	8	1	P	0
977	5	REF	5	6	9	1	A	1
978	5	REF	5	6	10	1	A	1
979	5	REF	5	6	11	1	P	0
980	5	REF	6	2	1	1	P	0
981	5	REF	6	2	2	1	P	0
982	5	REF	6	2	3	1	P	0
983	5	REF	6	2	4	1	A	1
984	5	REF	6	2	5	1	P	0
985	5	REF	6	2	6	1	P	0
986	5	REF	6	2	7	1	P	0
987	5	REF	6	2	8	1	P	0
988	5	REF	6	2	9	1	P	0
989	5	REF	6	2	10	1	P	0
990	5	REF	6	2	11	1	P	0
991	6	HMU	1	8	1	2	P	0
992	6	HMU	1	8	2	2	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
993	6	HMU	1	8	3	2	P	0
994	6	HMU	1	8	4	2	A	1
995	6	HMU	1	8	5	2	P	0
996	6	HMU	1	8	6	2	P	0
997	6	HMU	1	8	7	2	A	1
998	6	HMU	1	8	8	2	P	0
999	6	HMU	1	8	9	2	P	0
1000	6	HMU	1	8	10	2	P	0
1001	6	HMU	1	8	11	2	P	0
1002	6	HMU	2	7	1	2	P	0
1003	6	HMU	2	7	2	2	P	0
1004	6	HMU	2	7	3	2	P	0
1005	6	HMU	2	7	4	2	P	0
1006	6	HMU	2	7	5	2	P	0
1007	6	HMU	2	7	6	2	P	0
1008	6	HMU	2	7	7	2	P	0
1009	6	HMU	2	7	8	2	P	0
1010	6	HMU	2	7	9	2	P	0
1011	6	HMU	2	7	10	2	P	0
1012	6	HMU	2	7	11	2	P	0
1013	6	HMU	3	5	1	2	A	1
1014	6	HMU	3	5	2	2	P	0
1015	6	HMU	3	5	3	2	A	1
1016	6	HMU	3	5	4	2	P	0
1017	6	HMU	3	5	5	2	P	0
1018	6	HMU	3	5	6	2	P	0
1019	6	HMU	3	5	7	2	P	0
1020	6	HMU	3	5	8	2	P	0
1021	6	HMU	3	5	9	2	P	0
1022	6	HMU	3	5	10	2	P	0
1023	6	HMU	3	5	11	2	P	0
1024	6	HMU	4	6	1	2	P	0
1025	6	HMU	4	6	2	2	P	0
1026	6	HMU	4	6	3	2	A	1
1027	6	HMU	4	6	4	2	P	0
1028	6	HMU	4	6	5	2	P	0
1029	6	HMU	4	6	6	2	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1030	6	HMU	4	6	7	2	P	0
1031	6	HMU	4	6	8	2	P	0
1032	6	HMU	4	6	9	2	P	0
1033	6	HMU	4	6	10	2	P	0
1034	6	HMU	4	6	11	2	P	0
1035	6	HMU	5	2	1	2	P	0
1036	6	HMU	5	2	2	2	P	0
1037	6	HMU	5	2	3	2	P	0
1038	6	HMU	5	2	4	2	A	1
1039	6	HMU	5	2	5	2	P	0
1040	6	HMU	5	2	6	2	P	0
1041	6	HMU	5	2	7	2	P	0
1042	6	HMU	5	2	8	2	P	0
1043	6	HMU	5	2	9	2	P	0
1044	6	HMU	5	2	10	2	P	0
1045	6	HMU	5	2	11	2	P	0
1046	6	HMU	6	8	1	2	P	0
1047	6	HMU	6	8	2	2	P	0
1048	6	HMU	6	8	3	2	P	0
1049	6	HMU	6	8	4	2	A	1
1050	6	HMU	6	8	5	2	P	0
1051	6	HMU	6	8	6	2	P	0
1052	6	HMU	6	8	7	2	P	0
1053	6	HMU	6	8	8	2	P	0
1054	6	HMU	6	8	9	2	P	0
1055	6	HMU	6	8	10	2	P	0
1056	6	HMU	6	8	11	2	P	0
1057	6	MSA	1	8	1	2	P	0
1058	6	MSA	1	8	2	2	P	0
1059	6	MSA	1	8	3	2	P	0
1060	6	MSA	1	8	4	2	A	1
1061	6	MSA	1	8	5	2	P	0
1062	6	MSA	1	8	6	2	P	0
1063	6	MSA	1	8	7	2	P	0
1064	6	MSA	1	8	8	2	P	0
1065	6	MSA	1	8	9	2	P	0
1066	6	MSA	1	8	10	2	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1067	6	MSA	1	8	11	2	P	0
1068	6	MSA	2	7	1	2	A	1
1069	6	MSA	2	7	2	2	A	1
1070	6	MSA	2	7	3	2	P	0
1071	6	MSA	2	7	4	2	A	1
1072	6	MSA	2	7	5	2	P	0
1073	6	MSA	2	7	6	2	P	0
1074	6	MSA	2	7	7	2	P	0
1075	6	MSA	2	7	8	2	P	0
1076	6	MSA	2	7	9	2	P	0
1077	6	MSA	2	7	10	2	P	0
1078	6	MSA	2	7	11	2	P	0
1079	6	MSA	3	5	1	2	P	0
1080	6	MSA	3	5	2	2	P	0
1081	6	MSA	3	5	3	2	P	0
1082	6	MSA	3	5	4	2	P	0
1083	6	MSA	3	5	5	2	P	0
1084	6	MSA	3	5	6	2	P	0
1085	6	MSA	3	5	7	2	A	1
1086	6	MSA	3	5	8	2	P	0
1087	6	MSA	3	5	9	2	P	0
1088	6	MSA	3	5	10	2	P	0
1089	6	MSA	3	5	11	2	P	0
1090	6	MSA	4	6	1	2	P	0
1091	6	MSA	4	6	2	2	P	0
1092	6	MSA	4	6	3	2	P	0
1093	6	MSA	4	6	4	2	P	0
1094	6	MSA	4	6	5	2	P	0
1095	6	MSA	4	6	6	2	P	0
1096	6	MSA	4	6	7	2	P	0
1097	6	MSA	4	6	8	2	P	0
1098	6	MSA	4	6	9	2	P	0
1099	6	MSA	4	6	10	2	P	0
1100	6	MSA	4	6	11	2	P	0
1101	6	MSA	5	2	1	2	P	0
1102	6	MSA	5	2	2	2	P	0
1103	6	MSA	5	2	3	2	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1104	6	MSA	5	2	4	2	P	0
1105	6	MSA	5	2	5	2	P	0
1106	6	MSA	5	2	6	2	A	1
1107	6	MSA	5	2	7	2	P	0
1108	6	MSA	5	2	8	2	P	0
1109	6	MSA	5	2	9	2	P	0
1110	6	MSA	5	2	10	2	P	0
1111	6	MSA	5	2	11	2	P	0
1112	6	MSA	6	8	1	2	P	0
1113	6	MSA	6	8	2	2	P	0
1114	6	MSA	6	8	3	2	P	0
1115	6	MSA	6	8	4	2	P	0
1116	6	MSA	6	8	5	2	P	0
1117	6	MSA	6	8	6	2	P	0
1118	6	MSA	6	8	7	2	P	0
1119	6	MSA	6	8	8	2	P	0
1120	6	MSA	6	8	9	2	P	0
1121	6	MSA	6	8	10	2	P	0
1122	6	MSA	6	8	11	2	P	0
1123	6	REF	1	8	1	2	P	0
1124	6	REF	1	8	2	2	A	1
1125	6	REF	1	8	3	2	P	0
1126	6	REF	1	8	4	2	P	0
1127	6	REF	1	8	5	2	P	0
1128	6	REF	1	8	6	2	A	1
1129	6	REF	1	8	7	2	P	0
1130	6	REF	1	8	8	2	A	1
1131	6	REF	1	8	9	2	A	1
1132	6	REF	1	8	10	2	A	1
1133	6	REF	1	8	11	2	P	0
1134	6	REF	2	7	1	2	A	1
1135	6	REF	2	7	2	2	A	1
1136	6	REF	2	7	3	2	P	0
1137	6	REF	2	7	4	2	P	0
1138	6	REF	2	7	5	2	P	0
1139	6	REF	2	7	6	2	P	0
1140	6	REF	2	7	7	2	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1141	6	REF	2	7	8	2	P	0
1142	6	REF	2	7	9	2	P	0
1143	6	REF	2	7	10	2	P	0
1144	6	REF	2	7	11	2	P	0
1145	6	REF	3	5	1	2	A	1
1146	6	REF	3	5	2	2	P	0
1147	6	REF	3	5	3	2	P	0
1148	6	REF	3	5	4	2	A	1
1149	6	REF	3	5	5	2	P	0
1150	6	REF	3	5	6	2	P	0
1151	6	REF	3	5	7	2	A	1
1152	6	REF	3	5	8	2	P	0
1153	6	REF	3	5	9	2	P	0
1154	6	REF	3	5	10	2	P	0
1155	6	REF	3	5	11	2	P	0
1156	6	REF	4	6	1	2	A	1
1157	6	REF	4	6	2	2	A	1
1158	6	REF	4	6	3	2	A	1
1159	6	REF	4	6	4	2	P	0
1160	6	REF	4	6	5	2	P	0
1161	6	REF	4	6	6	2	P	0
1162	6	REF	4	6	7	2	P	0
1163	6	REF	4	6	8	2	P	0
1164	6	REF	4	6	9	2	P	0
1165	6	REF	4	6	10	2	P	0
1166	6	REF	4	6	11	2	A	1
1167	6	REF	5	2	1	2	A	1
1168	6	REF	5	2	2	2	A	1
1169	6	REF	5	2	3	2	P	0
1170	6	REF	5	2	4	2	P	0
1171	6	REF	5	2	5	2	A	1
1172	6	REF	5	2	6	2	A	1
1173	6	REF	5	2	7	2	P	0
1174	6	REF	5	2	8	2	A	1
1175	6	REF	5	2	9	2	P	0
1176	6	REF	5	2	10	2	P	0
1177	6	REF	5	2	11	2	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1178	6	REF	6	8	1	2	A	1
1179	6	REF	6	8	2	2	A	1
1180	6	REF	6	8	3	2	P	0
1181	6	REF	6	8	4	2	P	0
1182	6	REF	6	8	5	2	P	0
1183	6	REF	6	8	6	2	P	0
1184	6	REF	6	8	7	2	P	0
1185	6	REF	6	8	8	2	P	0
1186	6	REF	6	8	9	2	A	1
1187	6	REF	6	8	10	2	A	1
1188	6	REF	6	8	11	2	P	0
1189	7	HMU	1	7	1	3	P	0
1190	7	HMU	1	7	2	3	P	0
1191	7	HMU	1	7	3	3	P	0
1192	7	HMU	1	7	4	3	P	0
1193	7	HMU	1	7	5	3	P	0
1194	7	HMU	1	7	6	3	P	0
1195	7	HMU	1	7	7	3	P	0
1196	7	HMU	1	7	8	3	P	0
1197	7	HMU	1	7	9	3	P	0
1198	7	HMU	1	7	10	3	P	0
1199	7	HMU	1	7	11	3	P	0
1200	7	HMU	2	6	1	3	P	0
1201	7	HMU	2	6	2	3	P	0
1202	7	HMU	2	6	3	3	P	0
1203	7	HMU	2	6	4	3	P	0
1204	7	HMU	2	6	5	3	P	0
1205	7	HMU	2	6	6	3	P	0
1206	7	HMU	2	6	7	3	P	0
1207	7	HMU	2	6	8	3	P	0
1208	7	HMU	2	6	9	3	P	0
1209	7	HMU	2	6	10	3	P	0
1210	7	HMU	2	6	11	3	P	0
1211	7	HMU	3	7	1	3	P	0
1212	7	HMU	3	7	2	3	P	0
1213	7	HMU	3	7	3	3	P	0
1214	7	HMU	3	7	4	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1215	7	HMU	3	7	5	3	P	0
1216	7	HMU	3	7	6	3	P	0
1217	7	HMU	3	7	7	3	P	0
1218	7	HMU	3	7	8	3	P	0
1219	7	HMU	3	7	9	3	P	0
1220	7	HMU	3	7	10	3	P	0
1221	7	HMU	3	7	11	3	P	0
1222	7	HMU	4	9	1	3	P	0
1223	7	HMU	4	9	2	3	P	0
1224	7	HMU	4	9	3	3	P	0
1225	7	HMU	4	9	4	3	P	0
1226	7	HMU	4	9	5	3	P	0
1227	7	HMU	4	9	6	3	P	0
1228	7	HMU	4	9	7	3	P	0
1229	7	HMU	4	9	8	3	P	0
1230	7	HMU	4	9	9	3	P	0
1231	7	HMU	4	9	10	3	P	0
1232	7	HMU	4	9	11	3	P	0
1233	7	HMU	5	8	1	3	P	0
1234	7	HMU	5	8	2	3	P	0
1235	7	HMU	5	8	3	3	A	1
1236	7	HMU	5	8	4	3	P	0
1237	7	HMU	5	8	5	3	P	0
1238	7	HMU	5	8	6	3	P	0
1239	7	HMU	5	8	7	3	P	0
1240	7	HMU	5	8	8	3	P	0
1241	7	HMU	5	8	9	3	A	1
1242	7	HMU	5	8	10	3	P	0
1243	7	HMU	5	8	11	3	P	0
1244	7	HMU	6	1	1	3	P	0
1245	7	HMU	6	1	2	3	P	0
1246	7	HMU	6	1	3	3	P	0
1247	7	HMU	6	1	4	3	P	0
1248	7	HMU	6	1	5	3	P	0
1249	7	HMU	6	1	6	3	P	0
1250	7	HMU	6	1	7	3	P	0
1251	7	HMU	6	1	8	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1252	7	HMU	6	1	9	3	P	0
1253	7	HMU	6	1	10	3	P	0
1254	7	HMU	6	1	11	3	P	0
1255	7	MSA	1	7	1	3	P	0
1256	7	MSA	1	7	2	3	A	1
1257	7	MSA	1	7	3	3	P	0
1258	7	MSA	1	7	4	3	P	0
1259	7	MSA	1	7	5	3	P	0
1260	7	MSA	1	7	6	3	P	0
1261	7	MSA	1	7	7	3	P	0
1262	7	MSA	1	7	8	3	P	0
1263	7	MSA	1	7	9	3	P	0
1264	7	MSA	1	7	10	3	P	0
1265	7	MSA	1	7	11	3	P	0
1266	7	MSA	2	6	1	3	P	0
1267	7	MSA	2	6	2	3	P	0
1268	7	MSA	2	6	3	3	P	0
1269	7	MSA	2	6	4	3	P	0
1270	7	MSA	2	6	5	3	P	0
1271	7	MSA	2	6	6	3	P	0
1272	7	MSA	2	6	7	3	P	0
1273	7	MSA	2	6	8	3	P	0
1274	7	MSA	2	6	9	3	P	0
1275	7	MSA	2	6	10	3	P	0
1276	7	MSA	2	6	11	3	A	1
1277	7	MSA	3	7	1	3	P	0
1278	7	MSA	3	7	2	3	P	0
1279	7	MSA	3	7	3	3	P	0
1280	7	MSA	3	7	4	3	P	0
1281	7	MSA	3	7	5	3	P	0
1282	7	MSA	3	7	6	3	P	0
1283	7	MSA	3	7	7	3	P	0
1284	7	MSA	3	7	8	3	P	0
1285	7	MSA	3	7	9	3	P	0
1286	7	MSA	3	7	10	3	P	0
1287	7	MSA	3	7	11	3	P	0
1288	7	MSA	4	9	1	3	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1289	7	MSA	4	9	2	3	P	0
1290	7	MSA	4	9	3	3	P	0
1291	7	MSA	4	9	4	3	A	1
1292	7	MSA	4	9	5	3	P	0
1293	7	MSA	4	9	6	3	P	0
1294	7	MSA	4	9	7	3	P	0
1295	7	MSA	4	9	8	3	P	0
1296	7	MSA	4	9	9	3	P	0
1297	7	MSA	4	9	10	3	P	0
1298	7	MSA	4	9	11	3	P	0
1299	7	MSA	5	8	1	3	P	0
1300	7	MSA	5	8	2	3	P	0
1301	7	MSA	5	8	3	3	P	0
1302	7	MSA	5	8	4	3	P	0
1303	7	MSA	5	8	5	3	P	0
1304	7	MSA	5	8	6	3	P	0
1305	7	MSA	5	8	7	3	P	0
1306	7	MSA	5	8	8	3	P	0
1307	7	MSA	5	8	9	3	P	0
1308	7	MSA	5	8	10	3	P	0
1309	7	MSA	5	8	11	3	P	0
1310	7	MSA	6	1	1	3	A	1
1311	7	MSA	6	1	2	3	A	1
1312	7	MSA	6	1	3	3	A	1
1313	7	MSA	6	1	4	3	P	0
1314	7	MSA	6	1	5	3	P	0
1315	7	MSA	6	1	6	3	P	0
1316	7	MSA	6	1	7	3	P	0
1317	7	MSA	6	1	8	3	P	0
1318	7	MSA	6	1	9	3	P	0
1319	7	MSA	6	1	10	3	P	0
1320	7	MSA	6	1	11	3	P	0
1321	7	REF	1	7	1	3	A	1
1322	7	REF	1	7	2	3	A	1
1323	7	REF	1	7	3	3	P	0
1324	7	REF	1	7	4	3	A	1
1325	7	REF	1	7	5	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1326	7	REF	1	7	6	3	A	1
1327	7	REF	1	7	7	3	P	0
1328	7	REF	1	7	8	3	P	0
1329	7	REF	1	7	9	3	P	0
1330	7	REF	1	7	10	3	A	1
1331	7	REF	1	7	11	3	A	1
1332	7	REF	2	6	1	3	A	1
1333	7	REF	2	6	2	3	P	0
1334	7	REF	2	6	3	3	P	0
1335	7	REF	2	6	4	3	A	1
1336	7	REF	2	6	5	3	P	0
1337	7	REF	2	6	6	3	P	0
1338	7	REF	2	6	7	3	A	1
1339	7	REF	2	6	8	3	P	0
1340	7	REF	2	6	9	3	A	1
1341	7	REF	2	6	10	3	A	1
1342	7	REF	2	6	11	3	P	0
1343	7	REF	3	7	1	3	P	0
1344	7	REF	3	7	2	3	A	1
1345	7	REF	3	7	3	3	P	0
1346	7	REF	3	7	4	3	A	1
1347	7	REF	3	7	5	3	P	0
1348	7	REF	3	7	6	3	A	1
1349	7	REF	3	7	7	3	P	0
1350	7	REF	3	7	8	3	A	1
1351	7	REF	3	7	9	3	P	0
1352	7	REF	3	7	10	3	P	0
1353	7	REF	3	7	11	3	P	0
1354	7	REF	4	9	1	3	A	1
1355	7	REF	4	9	2	3	P	0
1356	7	REF	4	9	3	3	P	0
1357	7	REF	4	9	4	3	P	0
1358	7	REF	4	9	5	3	P	0
1359	7	REF	4	9	6	3	P	0
1360	7	REF	4	9	7	3	P	0
1361	7	REF	4	9	8	3	P	0
1362	7	REF	4	9	9	3	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1363	7	REF	4	9	10	3	A	1
1364	7	REF	4	9	11	3	P	0
1365	7	REF	5	8	1	3	P	0
1366	7	REF	5	8	2	3	P	0
1367	7	REF	5	8	3	3	P	0
1368	7	REF	5	8	4	3	P	0
1369	7	REF	5	8	5	3	P	0
1370	7	REF	5	8	6	3	P	0
1371	7	REF	5	8	7	3	P	0
1372	7	REF	5	8	8	3	A	1
1373	7	REF	5	8	9	3	A	1
1374	7	REF	5	8	10	3	P	0
1375	7	REF	5	8	11	3	P	0
1376	7	REF	6	1	1	3	A	1
1377	7	REF	6	1	2	3	P	0
1378	7	REF	6	1	3	3	P	0
1379	7	REF	6	1	4	3	A	1
1380	7	REF	6	1	5	3	P	0
1381	7	REF	6	1	6	3	A	1
1382	7	REF	6	1	7	3	P	0
1383	7	REF	6	1	8	3	P	0
1384	7	REF	6	1	9	3	P	0
1385	7	REF	6	1	10	3	P	0
1386	7	REF	6	1	11	3	A	1
1387	8	HMU	1	5	1	3	A	1
1388	8	HMU	1	5	2	3	P	0
1389	8	HMU	1	5	3	3	P	0
1390	8	HMU	1	5	4	3	P	0
1391	8	HMU	1	5	5	3	P	0
1392	8	HMU	1	5	6	3	P	0
1393	8	HMU	1	5	7	3	P	0
1394	8	HMU	1	5	8	3	A	1
1395	8	HMU	1	5	9	3	P	0
1396	8	HMU	1	5	10	3	P	0
1397	8	HMU	1	5	11	3	P	0
1398	8	HMU	2	5	1	3	P	0
1399	8	HMU	2	5	2	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1400	8	HMU	2	5	3	3	P	0
1401	8	HMU	2	5	4	3	P	0
1402	8	HMU	2	5	5	3	P	0
1403	8	HMU	2	5	6	3	P	0
1404	8	HMU	2	5	7	3	A	1
1405	8	HMU	2	5	8	3	P	0
1406	8	HMU	2	5	9	3	P	0
1407	8	HMU	2	5	10	3	P	0
1408	8	HMU	2	5	11	3	P	0
1409	8	HMU	3	1	1	3	A	1
1410	8	HMU	3	1	2	3	P	0
1411	8	HMU	3	1	3	3	A	1
1412	8	HMU	3	1	4	3	P	0
1413	8	HMU	3	1	5	3	P	0
1414	8	HMU	3	1	6	3	A	1
1415	8	HMU	3	1	7	3	P	0
1416	8	HMU	3	1	8	3	A	1
1417	8	HMU	3	1	9	3	P	0
1418	8	HMU	3	1	10	3	P	0
1419	8	HMU	3	1	11	3	P	0
1420	8	HMU	4	1	1	3	P	0
1421	8	HMU	4	1	2	3	A	1
1422	8	HMU	4	1	3	3	P	0
1423	8	HMU	4	1	4	3	P	0
1424	8	HMU	4	1	5	3	P	0
1425	8	HMU	4	1	6	3	P	0
1426	8	HMU	4	1	7	3	P	0
1427	8	HMU	4	1	8	3	P	0
1428	8	HMU	4	1	9	3	P	0
1429	8	HMU	4	1	10	3	P	0
1430	8	HMU	4	1	11	3	P	0
1431	8	HMU	5	9	1	3	A	1
1432	8	HMU	5	9	2	3	P	0
1433	8	HMU	5	9	3	3	P	0
1434	8	HMU	5	9	4	3	A	1
1435	8	HMU	5	9	5	3	P	0
1436	8	HMU	5	9	6	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1437	8	HMU	5	9	7	3	P	0
1438	8	HMU	5	9	8	3	P	0
1439	8	HMU	5	9	9	3	A	1
1440	8	HMU	5	9	10	3	A	1
1441	8	HMU	5	9	11	3	A	1
1442	8	HMU	6	4	1	3	P	0
1443	8	HMU	6	4	2	3	P	0
1444	8	HMU	6	4	3	3	P	0
1445	8	HMU	6	4	4	3	P	0
1446	8	HMU	6	4	5	3	P	0
1447	8	HMU	6	4	6	3	P	0
1448	8	HMU	6	4	7	3	P	0
1449	8	HMU	6	4	8	3	P	0
1450	8	HMU	6	4	9	3	P	0
1451	8	HMU	6	4	10	3	P	0
1452	8	HMU	6	4	11	3	P	0
1453	8	MSA	1	5	1	3	A	1
1454	8	MSA	1	5	2	3	P	0
1455	8	MSA	1	5	3	3	A	1
1456	8	MSA	1	5	4	3	P	0
1457	8	MSA	1	5	5	3	P	0
1458	8	MSA	1	5	6	3	P	0
1459	8	MSA	1	5	7	3	P	0
1460	8	MSA	1	5	8	3	A	1
1461	8	MSA	1	5	9	3	P	0
1462	8	MSA	1	5	10	3	P	0
1463	8	MSA	1	5	11	3	P	0
1464	8	MSA	2	5	1	3	P	0
1465	8	MSA	2	5	2	3	P	0
1466	8	MSA	2	5	3	3	P	0
1467	8	MSA	2	5	4	3	P	0
1468	8	MSA	2	5	5	3	P	0
1469	8	MSA	2	5	6	3	P	0
1470	8	MSA	2	5	7	3	A	1
1471	8	MSA	2	5	8	3	A	1
1472	8	MSA	2	5	9	3	A	1
1473	8	MSA	2	5	10	3	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1474	8	MSA	2	5	11	3	P	0
1475	8	MSA	3	1	1	3	A	1
1476	8	MSA	3	1	2	3	P	0
1477	8	MSA	3	1	3	3	P	0
1478	8	MSA	3	1	4	3	A	1
1479	8	MSA	3	1	5	3	P	0
1480	8	MSA	3	1	6	3	P	0
1481	8	MSA	3	1	7	3	P	0
1482	8	MSA	3	1	8	3	P	0
1483	8	MSA	3	1	9	3	P	0
1484	8	MSA	3	1	10	3	P	0
1485	8	MSA	3	1	11	3	P	0
1486	8	MSA	4	1	1	3	P	0
1487	8	MSA	4	1	2	3	P	0
1488	8	MSA	4	1	3	3	P	0
1489	8	MSA	4	1	4	3	P	0
1490	8	MSA	4	1	5	3	P	0
1491	8	MSA	4	1	6	3	A	1
1492	8	MSA	4	1	7	3	P	0
1493	8	MSA	4	1	8	3	P	0
1494	8	MSA	4	1	9	3	P	0
1495	8	MSA	4	1	10	3	P	0
1496	8	MSA	4	1	11	3	P	0
1497	8	MSA	5	9	1	3	A	1
1498	8	MSA	5	9	2	3	P	0
1499	8	MSA	5	9	3	3	P	0
1500	8	MSA	5	9	4	3	P	0
1501	8	MSA	5	9	5	3	P	0
1502	8	MSA	5	9	6	3	P	0
1503	8	MSA	5	9	7	3	P	0
1504	8	MSA	5	9	8	3	A	1
1505	8	MSA	5	9	9	3	P	0
1506	8	MSA	5	9	10	3	A	1
1507	8	MSA	5	9	11	3	P	0
1508	8	MSA	6	4	1	3	A	1
1509	8	MSA	6	4	2	3	P	0
1510	8	MSA	6	4	3	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1511	8	MSA	6	4	4	3	P	0
1512	8	MSA	6	4	5	3	A	1
1513	8	MSA	6	4	6	3	A	1
1514	8	MSA	6	4	7	3	A	1
1515	8	MSA	6	4	8	3	P	0
1516	8	MSA	6	4	9	3	A	1
1517	8	MSA	6	4	10	3	P	0
1518	8	MSA	6	4	11	3	P	0
1519	8	REF	1	5	1	3	P	0
1520	8	REF	1	5	2	3	A	1
1521	8	REF	1	5	3	3	P	0
1522	8	REF	1	5	4	3	P	0
1523	8	REF	1	5	5	3	A	1
1524	8	REF	1	5	6	3	A	1
1525	8	REF	1	5	7	3	P	0
1526	8	REF	1	5	8	3	P	0
1527	8	REF	1	5	9	3	A	1
1528	8	REF	1	5	10	3	P	0
1529	8	REF	1	5	11	3	P	0
1530	8	REF	2	5	1	3	A	1
1531	8	REF	2	5	2	3	A	1
1532	8	REF	2	5	3	3	A	1
1533	8	REF	2	5	4	3	P	0
1534	8	REF	2	5	5	3	A	1
1535	8	REF	2	5	6	3	A	1
1536	8	REF	2	5	7	3	P	0
1537	8	REF	2	5	8	3	A	1
1538	8	REF	2	5	9	3	P	0
1539	8	REF	2	5	10	3	A	1
1540	8	REF	2	5	11	3	A	1
1541	8	REF	3	1	1	3	P	0
1542	8	REF	3	1	2	3	A	1
1543	8	REF	3	1	3	3	A	1
1544	8	REF	3	1	4	3	A	1
1545	8	REF	3	1	5	3	A	1
1546	8	REF	3	1	6	3	P	0
1547	8	REF	3	1	7	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1548	8	REF	3	1	8	3	P	0
1549	8	REF	3	1	9	3	A	1
1550	8	REF	3	1	10	3	A	1
1551	8	REF	3	1	11	3	A	1
1552	8	REF	4	1	1	3	A	1
1553	8	REF	4	1	2	3	A	1
1554	8	REF	4	1	3	3	A	1
1555	8	REF	4	1	4	3	A	1
1556	8	REF	4	1	5	3	A	1
1557	8	REF	4	1	6	3	A	1
1558	8	REF	4	1	7	3	A	1
1559	8	REF	4	1	8	3	A	1
1560	8	REF	4	1	9	3	P	0
1561	8	REF	4	1	10	3	P	0
1562	8	REF	4	1	11	3	A	1
1563	8	REF	5	9	1	3	A	1
1564	8	REF	5	9	2	3	P	0
1565	8	REF	5	9	3	3	P	0
1566	8	REF	5	9	4	3	A	1
1567	8	REF	5	9	5	3	P	0
1568	8	REF	5	9	6	3	P	0
1569	8	REF	5	9	7	3	A	1
1570	8	REF	5	9	8	3	P	0
1571	8	REF	5	9	9	3	P	0
1572	8	REF	5	9	10	3	P	0
1573	8	REF	5	9	11	3	P	0
1574	8	REF	6	4	1	3	A	1
1575	8	REF	6	4	2	3	P	0
1576	8	REF	6	4	3	3	P	0
1577	8	REF	6	4	4	3	P	0
1578	8	REF	6	4	5	3	P	0
1579	8	REF	6	4	6	3	A	1
1580	8	REF	6	4	7	3	A	1
1581	8	REF	6	4	8	3	A	1
1582	8	REF	6	4	9	3	P	0
1583	8	REF	6	4	10	3	A	1
1584	8	REF	6	4	11	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1585	9	HMU	1	3	1	3	P	0
1586	9	HMU	1	3	2	3	P	0
1587	9	HMU	1	3	3	3	P	0
1588	9	HMU	1	3	4	3	P	0
1589	9	HMU	1	3	5	3	A	1
1590	9	HMU	1	3	6	3	P	0
1591	9	HMU	1	3	7	3	P	0
1592	9	HMU	1	3	8	3	P	0
1593	9	HMU	1	3	9	3	P	0
1594	9	HMU	1	3	10	3	P	0
1595	9	HMU	1	3	11	3	A	1
1596	9	HMU	2	6	1	3	P	0
1597	9	HMU	2	6	2	3	P	0
1598	9	HMU	2	6	3	3	P	0
1599	9	HMU	2	6	4	3	P	0
1600	9	HMU	2	6	5	3	P	0
1601	9	HMU	2	6	6	3	A	1
1602	9	HMU	2	6	7	3	P	0
1603	9	HMU	2	6	8	3	P	0
1604	9	HMU	2	6	9	3	P	0
1605	9	HMU	2	6	10	3	P	0
1606	9	HMU	2	6	11	3	P	0
1607	9	HMU	3	7	1	3	P	0
1608	9	HMU	3	7	2	3	A	1
1609	9	HMU	3	7	3	3	A	1
1610	9	HMU	3	7	4	3	P	0
1611	9	HMU	3	7	5	3	A	1
1612	9	HMU	3	7	6	3	P	0
1613	9	HMU	3	7	7	3	P	0
1614	9	HMU	3	7	8	3	P	0
1615	9	HMU	3	7	9	3	P	0
1616	9	HMU	3	7	10	3	P	0
1617	9	HMU	3	7	11	3	A	1
1618	9	HMU	4	4	1	3	P	0
1619	9	HMU	4	4	2	3	P	0
1620	9	HMU	4	4	3	3	P	0
1621	9	HMU	4	4	4	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1622	9	HMU	4	4	5	3	P	0
1623	9	HMU	4	4	6	3	P	0
1624	9	HMU	4	4	7	3	P	0
1625	9	HMU	4	4	8	3	P	0
1626	9	HMU	4	4	9	3	P	0
1627	9	HMU	4	4	10	3	P	0
1628	9	HMU	4	4	11	3	P	0
1629	9	HMU	5	9	1	3	A	1
1630	9	HMU	5	9	2	3	P	0
1631	9	HMU	5	9	3	3	P	0
1632	9	HMU	5	9	4	3	A	1
1633	9	HMU	5	9	5	3	P	0
1634	9	HMU	5	9	6	3	A	1
1635	9	HMU	5	9	7	3	A	1
1636	9	HMU	5	9	8	3	A	1
1637	9	HMU	5	9	9	3	P	0
1638	9	HMU	5	9	10	3	P	0
1639	9	HMU	5	9	11	3	P	0
1640	9	HMU	6	8	1	3	P	0
1641	9	HMU	6	8	2	3	P	0
1642	9	HMU	6	8	3	3	P	0
1643	9	HMU	6	8	4	3	P	0
1644	9	HMU	6	8	5	3	P	0
1645	9	HMU	6	8	6	3	P	0
1646	9	HMU	6	8	7	3	P	0
1647	9	HMU	6	8	8	3	P	0
1648	9	HMU	6	8	9	3	P	0
1649	9	HMU	6	8	10	3	P	0
1650	9	HMU	6	8	11	3	P	0
1651	9	MSA	1	3	1	3	P	0
1652	9	MSA	1	3	2	3	A	1
1653	9	MSA	1	3	3	3	P	0
1654	9	MSA	1	3	4	3	P	0
1655	9	MSA	1	3	5	3	P	0
1656	9	MSA	1	3	6	3	P	0
1657	9	MSA	1	3	7	3	A	1
1658	9	MSA	1	3	8	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1659	9	MSA	1	3	9	3	P	0
1660	9	MSA	1	3	10	3	A	1
1661	9	MSA	1	3	11	3	A	1
1662	9	MSA	2	6	1	3	P	0
1663	9	MSA	2	6	2	3	A	1
1664	9	MSA	2	6	3	3	P	0
1665	9	MSA	2	6	4	3	P	0
1666	9	MSA	2	6	5	3	P	0
1667	9	MSA	2	6	6	3	A	1
1668	9	MSA	2	6	7	3	P	0
1669	9	MSA	2	6	8	3	P	0
1670	9	MSA	2	6	9	3	P	0
1671	9	MSA	2	6	10	3	P	0
1672	9	MSA	2	6	11	3	P	0
1673	9	MSA	3	7	1	3	P	0
1674	9	MSA	3	7	2	3	P	0
1675	9	MSA	3	7	3	3	P	0
1676	9	MSA	3	7	4	3	P	0
1677	9	MSA	3	7	5	3	P	0
1678	9	MSA	3	7	6	3	A	1
1679	9	MSA	3	7	7	3	A	1
1680	9	MSA	3	7	8	3	P	0
1681	9	MSA	3	7	9	3	A	1
1682	9	MSA	3	7	10	3	P	0
1683	9	MSA	3	7	11	3	P	0
1684	9	MSA	4	4	1	3	A	1
1685	9	MSA	4	4	2	3	A	1
1686	9	MSA	4	4	3	3	P	0
1687	9	MSA	4	4	4	3	P	0
1688	9	MSA	4	4	5	3	P	0
1689	9	MSA	4	4	6	3	P	0
1690	9	MSA	4	4	7	3	P	0
1691	9	MSA	4	4	8	3	A	1
1692	9	MSA	4	4	9	3	P	0
1693	9	MSA	4	4	10	3	P	0
1694	9	MSA	4	4	11	3	A	1
1695	9	MSA	5	9	1	3	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1696	9	MSA	5	9	2	3	P	0
1697	9	MSA	5	9	3	3	P	0
1698	9	MSA	5	9	4	3	P	0
1699	9	MSA	5	9	5	3	P	0
1700	9	MSA	5	9	6	3	P	0
1701	9	MSA	5	9	7	3	P	0
1702	9	MSA	5	9	8	3	P	0
1703	9	MSA	5	9	9	3	P	0
1704	9	MSA	5	9	10	3	P	0
1705	9	MSA	5	9	11	3	P	0
1706	9	MSA	6	8	1	3	P	0
1707	9	MSA	6	8	2	3	A	1
1708	9	MSA	6	8	3	3	A	1
1709	9	MSA	6	8	4	3	P	0
1710	9	MSA	6	8	5	3	P	0
1711	9	MSA	6	8	6	3	A	1
1712	9	MSA	6	8	7	3	P	0
1713	9	MSA	6	8	8	3	P	0
1714	9	MSA	6	8	9	3	P	0
1715	9	MSA	6	8	10	3	A	1
1716	9	MSA	6	8	11	3	P	0
1717	9	REF	1	3	1	3	A	1
1718	9	REF	1	3	2	3	P	0
1719	9	REF	1	3	3	3	A	1
1720	9	REF	1	3	4	3	A	1
1721	9	REF	1	3	5	3	A	1
1722	9	REF	1	3	6	3	P	0
1723	9	REF	1	3	7	3	P	0
1724	9	REF	1	3	8	3	P	0
1725	9	REF	1	3	9	3	P	0
1726	9	REF	1	3	10	3	P	0
1727	9	REF	1	3	11	3	P	0
1728	9	REF	2	6	1	3	A	1
1729	9	REF	2	6	2	3	A	1
1730	9	REF	2	6	3	3	P	0
1731	9	REF	2	6	4	3	P	0
1732	9	REF	2	6	5	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1733	9	REF	2	6	6	3	P	0
1734	9	REF	2	6	7	3	P	0
1735	9	REF	2	6	8	3	P	0
1736	9	REF	2	6	9	3	A	1
1737	9	REF	2	6	10	3	A	1
1738	9	REF	2	6	11	3	P	0
1739	9	REF	3	7	1	3	A	1
1740	9	REF	3	7	2	3	A	1
1741	9	REF	3	7	3	3	A	1
1742	9	REF	3	7	4	3	P	0
1743	9	REF	3	7	5	3	A	1
1744	9	REF	3	7	6	3	P	0
1745	9	REF	3	7	7	3	P	0
1746	9	REF	3	7	8	3	P	0
1747	9	REF	3	7	9	3	P	0
1748	9	REF	3	7	10	3	P	0
1749	9	REF	3	7	11	3	P	0
1750	9	REF	4	4	1	3	A	1
1751	9	REF	4	4	2	3	A	1
1752	9	REF	4	4	3	3	P	0
1753	9	REF	4	4	4	3	P	0
1754	9	REF	4	4	5	3	A	1
1755	9	REF	4	4	6	3	P	0
1756	9	REF	4	4	7	3	A	1
1757	9	REF	4	4	8	3	P	0
1758	9	REF	4	4	9	3	P	0
1759	9	REF	4	4	10	3	P	0
1760	9	REF	4	4	11	3	A	1
1761	9	REF	5	9	1	3	A	1
1762	9	REF	5	9	2	3	P	0
1763	9	REF	5	9	3	3	P	0
1764	9	REF	5	9	4	3	P	0
1765	9	REF	5	9	5	3	P	0
1766	9	REF	5	9	6	3	A	1
1767	9	REF	5	9	7	3	P	0
1768	9	REF	5	9	8	3	P	0
1769	9	REF	5	9	9	3	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1770	9	REF	5	9	10	3	A	1
1771	9	REF	5	9	11	3	A	1
1772	9	REF	6	8	1	3	A	1
1773	9	REF	6	8	2	3	P	0
1774	9	REF	6	8	3	3	P	0
1775	9	REF	6	8	4	3	A	1
1776	9	REF	6	8	5	3	P	0
1777	9	REF	6	8	6	3	P	0
1778	9	REF	6	8	7	3	A	1
1779	9	REF	6	8	8	3	A	1
1780	9	REF	6	8	9	3	P	0
1781	9	REF	6	8	10	3	P	0
1782	9	REF	6	8	11	3	P	0
1783	10	HMU	1	6	1	4	A	1
1784	10	HMU	1	6	2	4	P	0
1785	10	HMU	1	6	3	4	P	0
1786	10	HMU	1	6	4	4	P	0
1787	10	HMU	1	6	5	4	P	0
1788	10	HMU	1	6	6	4	P	0
1789	10	HMU	1	6	7	4	P	0
1790	10	HMU	1	6	8	4	P	0
1791	10	HMU	1	6	9	4	P	0
1792	10	HMU	1	6	10	4	P	0
1793	10	HMU	1	6	11	4	P	0
1794	10	HMU	2	7	1	4	A	1
1795	10	HMU	2	7	2	4	P	0
1796	10	HMU	2	7	3	4	P	0
1797	10	HMU	2	7	4	4	P	0
1798	10	HMU	2	7	5	4	P	0
1799	10	HMU	2	7	6	4	P	0
1800	10	HMU	2	7	7	4	P	0
1801	10	HMU	2	7	8	4	P	0
1802	10	HMU	2	7	9	4	P	0
1803	10	HMU	2	7	10	4	P	0
1804	10	HMU	2	7	11	4	P	0
1805	10	HMU	3	3	1	4	P	0
1806	10	HMU	3	3	2	4	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1807	10	HMU	3	3	3	4	P	0
1808	10	HMU	3	3	4	4	P	0
1809	10	HMU	3	3	5	4	P	0
1810	10	HMU	3	3	6	4	P	0
1811	10	HMU	3	3	7	4	P	0
1812	10	HMU	3	3	8	4	P	0
1813	10	HMU	3	3	9	4	P	0
1814	10	HMU	3	3	10	4	P	0
1815	10	HMU	3	3	11	4	P	0
1816	10	HMU	4	5	1	4	P	0
1817	10	HMU	4	5	2	4	P	0
1818	10	HMU	4	5	3	4	P	0
1819	10	HMU	4	5	4	4	P	0
1820	10	HMU	4	5	5	4	P	0
1821	10	HMU	4	5	6	4	P	0
1822	10	HMU	4	5	7	4	P	0
1823	10	HMU	4	5	8	4	P	0
1824	10	HMU	4	5	9	4	P	0
1825	10	HMU	4	5	10	4	P	0
1826	10	HMU	4	5	11	4	P	0
1827	10	HMU	5	8	1	4	P	0
1828	10	HMU	5	8	2	4	P	0
1829	10	HMU	5	8	3	4	P	0
1830	10	HMU	5	8	4	4	P	0
1831	10	HMU	5	8	5	4	P	0
1832	10	HMU	5	8	6	4	P	0
1833	10	HMU	5	8	7	4	A	1
1834	10	HMU	5	8	8	4	P	0
1835	10	HMU	5	8	9	4	P	0
1836	10	HMU	5	8	10	4	P	0
1837	10	HMU	5	8	11	4	P	0
1838	10	HMU	6	2	1	4	P	0
1839	10	HMU	6	2	2	4	P	0
1840	10	HMU	6	2	3	4	P	0
1841	10	HMU	6	2	4	4	P	0
1842	10	HMU	6	2	5	4	P	0
1843	10	HMU	6	2	6	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1844	10	HMU	6	2	7	4	P	0
1845	10	HMU	6	2	8	4	P	0
1846	10	HMU	6	2	9	4	P	0
1847	10	HMU	6	2	10	4	P	0
1848	10	HMU	6	2	11	4	P	0
1849	10	MSA	1	6	1	4	P	0
1850	10	MSA	1	6	2	4	P	0
1851	10	MSA	1	6	3	4	P	0
1852	10	MSA	1	6	4	4	P	0
1853	10	MSA	1	6	5	4	P	0
1854	10	MSA	1	6	6	4	P	0
1855	10	MSA	1	6	7	4	P	0
1856	10	MSA	1	6	8	4	P	0
1857	10	MSA	1	6	9	4	P	0
1858	10	MSA	1	6	10	4	P	0
1859	10	MSA	1	6	11	4	P	0
1860	10	MSA	2	7	1	4	P	0
1861	10	MSA	2	7	2	4	P	0
1862	10	MSA	2	7	3	4	P	0
1863	10	MSA	2	7	4	4	P	0
1864	10	MSA	2	7	5	4	P	0
1865	10	MSA	2	7	6	4	P	0
1866	10	MSA	2	7	7	4	P	0
1867	10	MSA	2	7	8	4	A	1
1868	10	MSA	2	7	9	4	P	0
1869	10	MSA	2	7	10	4	P	0
1870	10	MSA	2	7	11	4	P	0
1871	10	MSA	3	3	1	4	P	0
1872	10	MSA	3	3	2	4	P	0
1873	10	MSA	3	3	3	4	P	0
1874	10	MSA	3	3	4	4	P	0
1875	10	MSA	3	3	5	4	P	0
1876	10	MSA	3	3	6	4	P	0
1877	10	MSA	3	3	7	4	P	0
1878	10	MSA	3	3	8	4	A	1
1879	10	MSA	3	3	9	4	P	0
1880	10	MSA	3	3	10	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1881	10	MSA	3	3	11	4	P	0
1882	10	MSA	4	5	1	4	P	0
1883	10	MSA	4	5	2	4	P	0
1884	10	MSA	4	5	3	4	P	0
1885	10	MSA	4	5	4	4	P	0
1886	10	MSA	4	5	5	4	P	0
1887	10	MSA	4	5	6	4	P	0
1888	10	MSA	4	5	7	4	P	0
1889	10	MSA	4	5	8	4	P	0
1890	10	MSA	4	5	9	4	P	0
1891	10	MSA	4	5	10	4	P	0
1892	10	MSA	4	5	11	4	A	1
1893	10	MSA	5	8	1	4	P	0
1894	10	MSA	5	8	2	4	P	0
1895	10	MSA	5	8	3	4	P	0
1896	10	MSA	5	8	4	4	P	0
1897	10	MSA	5	8	5	4	P	0
1898	10	MSA	5	8	6	4	P	0
1899	10	MSA	5	8	7	4	P	0
1900	10	MSA	5	8	8	4	p	0
1901	10	MSA	5	8	9	4	A	1
1902	10	MSA	5	8	10	4	P	0
1903	10	MSA	5	8	11	4	P	0
1904	10	MSA	6	2	1	4	A	1
1905	10	MSA	6	2	2	4	P	0
1906	10	MSA	6	2	3	4	P	0
1907	10	MSA	6	2	4	4	P	0
1908	10	MSA	6	2	5	4	P	0
1909	10	MSA	6	2	6	4	P	0
1910	10	MSA	6	2	7	4	P	0
1911	10	MSA	6	2	8	4	P	0
1912	10	MSA	6	2	9	4	P	0
1913	10	MSA	6	2	10	4	P	0
1914	10	MSA	6	2	11	4	P	0
1915	10	REF	1	6	1	4	A	1
1916	10	REF	1	6	2	4	A	1
1917	10	REF	1	6	3	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1918	10	REF	1	6	4	4	A	1
1919	10	REF	1	6	5	4	A	1
1920	10	REF	1	6	6	4	P	0
1921	10	REF	1	6	7	4	P	0
1922	10	REF	1	6	8	4	A	1
1923	10	REF	1	6	9	4	A	1
1924	10	REF	1	6	10	4	A	1
1925	10	REF	1	6	11	4	A	1
1926	10	REF	2	7	1	4	A	1
1927	10	REF	2	7	2	4	P	0
1928	10	REF	2	7	3	4	A	1
1929	10	REF	2	7	4	4	A	1
1930	10	REF	2	7	5	4	A	1
1931	10	REF	2	7	6	4	P	0
1932	10	REF	2	7	7	4	A	1
1933	10	REF	2	7	8	4	P	0
1934	10	REF	2	7	9	4	A	1
1935	10	REF	2	7	10	4	A	1
1936	10	REF	2	7	11	4	P	0
1937	10	REF	3	3	1	4	P	0
1938	10	REF	3	3	2	4	P	0
1939	10	REF	3	3	3	4	P	0
1940	10	REF	3	3	4	4	P	0
1941	10	REF	3	3	5	4	P	0
1942	10	REF	3	3	6	4	A	1
1943	10	REF	3	3	7	4	P	0
1944	10	REF	3	3	8	4	P	0
1945	10	REF	3	3	9	4	P	0
1946	10	REF	3	3	10	4	P	0
1947	10	REF	3	3	11	4	P	0
1948	10	REF	4	5	1	4	P	0
1949	10	REF	4	5	2	4	P	0
1950	10	REF	4	5	3	4	P	0
1951	10	REF	4	5	4	4	A	1
1952	10	REF	4	5	5	4	P	0
1953	10	REF	4	5	6	4	P	0
1954	10	REF	4	5	7	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1955	10	REF	4	5	8	4	A	1
1956	10	REF	4	5	9	4	A	1
1957	10	REF	4	5	10	4	P	0
1958	10	REF	4	5	11	4	P	0
1959	10	REF	5	8	1	4	P	0
1960	10	REF	5	8	2	4	P	0
1961	10	REF	5	8	3	4	P	0
1962	10	REF	5	8	4	4	P	0
1963	10	REF	5	8	5	4	P	0
1964	10	REF	5	8	6	4	P	0
1965	10	REF	5	8	7	4	P	0
1966	10	REF	5	8	8	4	P	0
1967	10	REF	5	8	9	4	P	0
1968	10	REF	5	8	10	4	A	1
1969	10	REF	5	8	11	4	P	0
1970	10	REF	6	2	1	4	P	0
1971	10	REF	6	2	2	4	P	0
1972	10	REF	6	2	3	4	A	1
1973	10	REF	6	2	4	4	P	0
1974	10	REF	6	2	5	4	P	0
1975	10	REF	6	2	6	4	P	0
1976	10	REF	6	2	7	4	A	1
1977	10	REF	6	2	8	4	P	0
1978	10	REF	6	2	9	4	P	0
1979	10	REF	6	2	10	4	A	1
1980	10	REF	6	2	11	4	P	0
1981	11	HMU	1	6	1	4	A	1
1982	11	HMU	1	6	2	4	A	1
1983	11	HMU	1	6	3	4	P	0
1984	11	HMU	1	6	4	4	A	1
1985	11	HMU	1	6	5	4	A	1
1986	11	HMU	1	6	6	4	P	0
1987	11	HMU	1	6	7	4	P	0
1988	11	HMU	1	6	8	4	P	0
1989	11	HMU	1	6	9	4	P	0
1990	11	HMU	1	6	10	4	A	1
1991	11	HMU	1	6	11	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
1992	11	HMU	2	3	1	4	A	1
1993	11	HMU	2	3	2	4	A	1
1994	11	HMU	2	3	3	4	P	0
1995	11	HMU	2	3	4	4	P	0
1996	11	HMU	2	3	5	4	P	0
1997	11	HMU	2	3	6	4	P	0
1998	11	HMU	2	3	7	4	P	0
1999	11	HMU	2	3	8	4	P	0
2000	11	HMU	2	3	9	4	P	0
2001	11	HMU	2	3	10	4	P	0
2002	11	HMU	2	3	11	4	A	1
2003	11	HMU	3	5	1	4	P	0
2004	11	HMU	3	5	2	4	A	1
2005	11	HMU	3	5	3	4	A	1
2006	11	HMU	3	5	4	4	P	0
2007	11	HMU	3	5	5	4	P	0
2008	11	HMU	3	5	6	4	P	0
2009	11	HMU	3	5	7	4	P	0
2010	11	HMU	3	5	8	4	A	1
2011	11	HMU	3	5	9	4	P	0
2012	11	HMU	3	5	10	4	P	0
2013	11	HMU	3	5	11	4	P	0
2014	11	HMU	4	2	1	4	P	0
2015	11	HMU	4	2	2	4	P	0
2016	11	HMU	4	2	3	4	P	0
2017	11	HMU	4	2	4	4	P	0
2018	11	HMU	4	2	5	4	P	0
2019	11	HMU	4	2	6	4	P	0
2020	11	HMU	4	2	7	4	P	0
2021	11	HMU	4	2	8	4	P	0
2022	11	HMU	4	2	9	4	P	0
2023	11	HMU	4	2	10	4	P	0
2024	11	HMU	4	2	11	4	P	0
2025	11	HMU	5	4	1	4	P	0
2026	11	HMU	5	4	2	4	A	1
2027	11	HMU	5	4	3	4	P	0
2028	11	HMU	5	4	4	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2029	11	HMU	5	4	5	4	A	1
2030	11	HMU	5	4	6	4	P	0
2031	11	HMU	5	4	7	4	A	1
2032	11	HMU	5	4	8	4	P	0
2033	11	HMU	5	4	9	4	P	0
2034	11	HMU	5	4	10	4	P	0
2035	11	HMU	5	4	11	4	P	0
2036	11	HMU	6	3	1	4	P	0
2037	11	HMU	6	3	2	4	P	0
2038	11	HMU	6	3	3	4	P	0
2039	11	HMU	6	3	4	4	P	0
2040	11	HMU	6	3	5	4	P	0
2041	11	HMU	6	3	6	4	A	1
2042	11	HMU	6	3	7	4	P	0
2043	11	HMU	6	3	8	4	P	0
2044	11	HMU	6	3	9	4	A	1
2045	11	HMU	6	3	10	4	P	0
2046	11	HMU	6	3	11	4	P	0
2047	11	MSA	1	6	1	4	P	0
2048	11	MSA	1	6	2	4	P	0
2049	11	MSA	1	6	3	4	P	0
2050	11	MSA	1	6	4	4	P	0
2051	11	MSA	1	6	5	4	P	0
2052	11	MSA	1	6	6	4	P	0
2053	11	MSA	1	6	7	4	A	1
2054	11	MSA	1	6	8	4	P	0
2055	11	MSA	1	6	9	4	P	0
2056	11	MSA	1	6	10	4	A	1
2057	11	MSA	1	6	11	4	A	1
2058	11	MSA	2	3	1	4	P	0
2059	11	MSA	2	3	2	4	A	1
2060	11	MSA	2	3	3	4	P	0
2061	11	MSA	2	3	4	4	P	0
2062	11	MSA	2	3	5	4	A	1
2063	11	MSA	2	3	6	4	P	0
2064	11	MSA	2	3	7	4	P	0
2065	11	MSA	2	3	8	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2066	11	MSA	2	3	9	4	P	0
2067	11	MSA	2	3	10	4	A	1
2068	11	MSA	2	3	11	4	A	1
2069	11	MSA	3	5	1	4	P	0
2070	11	MSA	3	5	2	4	A	1
2071	11	MSA	3	5	3	4	P	0
2072	11	MSA	3	5	4	4	P	0
2073	11	MSA	3	5	5	4	P	0
2074	11	MSA	3	5	6	4	A	1
2075	11	MSA	3	5	7	4	P	0
2076	11	MSA	3	5	8	4	P	0
2077	11	MSA	3	5	9	4	P	0
2078	11	MSA	3	5	10	4	P	0
2079	11	MSA	3	5	11	4	P	0
2080	11	MSA	4	2	1	4	P	0
2081	11	MSA	4	2	2	4	P	0
2082	11	MSA	4	2	3	4	P	0
2083	11	MSA	4	2	4	4	A	1
2084	11	MSA	4	2	5	4	P	0
2085	11	MSA	4	2	6	4	P	0
2086	11	MSA	4	2	7	4	P	0
2087	11	MSA	4	2	8	4	A	1
2088	11	MSA	4	2	9	4	P	0
2089	11	MSA	4	2	10	4	A	1
2090	11	MSA	4	2	11	4	A	1
2091	11	MSA	5	4	1	4	A	1
2092	11	MSA	5	4	2	4	P	0
2093	11	MSA	5	4	3	4	P	0
2094	11	MSA	5	4	4	4	P	0
2095	11	MSA	5	4	5	4	P	0
2096	11	MSA	5	4	6	4	P	0
2097	11	MSA	5	4	7	4	P	0
2098	11	MSA	5	4	8	4	P	0
2099	11	MSA	5	4	9	4	P	0
2100	11	MSA	5	4	10	4	A	1
2101	11	MSA	5	4	11	4	A	1
2102	11	MSA	6	3	1	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2103	11	MSA	6	3	2	4	P	0
2104	11	MSA	6	3	3	4	P	0
2105	11	MSA	6	3	4	4	A	1
2106	11	MSA	6	3	5	4	A	1
2107	11	MSA	6	3	6	4	P	0
2108	11	MSA	6	3	7	4	P	0
2109	11	MSA	6	3	8	4	P	0
2110	11	MSA	6	3	9	4	A	1
2111	11	MSA	6	3	10	4	A	1
2112	11	MSA	6	3	11	4	P	0
2113	11	REF	1	6	1	4	A	1
2114	11	REF	1	6	2	4	A	1
2115	11	REF	1	6	3	4	A	1
2116	11	REF	1	6	4	4	A	1
2117	11	REF	1	6	5	4	A	1
2118	11	REF	1	6	6	4	A	1
2119	11	REF	1	6	7	4	A	1
2120	11	REF	1	6	8	4	A	1
2121	11	REF	1	6	9	4	A	1
2122	11	REF	1	6	10	4	A	1
2123	11	REF	1	6	11	4	A	1
2124	11	REF	2	3	1	4	A	1
2125	11	REF	2	3	2	4	A	1
2126	11	REF	2	3	3	4	A	1
2127	11	REF	2	3	4	4	P	0
2128	11	REF	2	3	5	4	A	1
2129	11	REF	2	3	6	4	A	1
2130	11	REF	2	3	7	4	P	0
2131	11	REF	2	3	8	4	A	1
2132	11	REF	2	3	9	4	A	1
2133	11	REF	2	3	10	4	A	1
2134	11	REF	2	3	11	4	A	1
2135	11	REF	3	5	1	4	A	1
2136	11	REF	3	5	2	4	A	1
2137	11	REF	3	5	3	4	A	1
2138	11	REF	3	5	4	4	A	1
2139	11	REF	3	5	5	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2140	11	REF	3	5	6	4	P	0
2141	11	REF	3	5	7	4	P	0
2142	11	REF	3	5	8	4	A	1
2143	11	REF	3	5	9	4	A	1
2144	11	REF	3	5	10	4	A	1
2145	11	REF	3	5	11	4	A	1
2146	11	REF	4	2	1	4	A	1
2147	11	REF	4	2	2	4	A	1
2148	11	REF	4	2	3	4	A	1
2149	11	REF	4	2	4	4	A	1
2150	11	REF	4	2	5	4	A	1
2151	11	REF	4	2	6	4	A	1
2152	11	REF	4	2	7	4	A	1
2153	11	REF	4	2	8	4	P	0
2154	11	REF	4	2	9	4	A	1
2155	11	REF	4	2	10	4	A	1
2156	11	REF	4	2	11	4	A	1
2157	11	REF	5	4	1	4	A	1
2158	11	REF	5	4	2	4	A	1
2159	11	REF	5	4	3	4	P	0
2160	11	REF	5	4	4	4	P	0
2161	11	REF	5	4	5	4	P	0
2162	11	REF	5	4	6	4	P	0
2163	11	REF	5	4	7	4	A	1
2164	11	REF	5	4	8	4	P	0
2165	11	REF	5	4	9	4	A	1
2166	11	REF	5	4	10	4	A	1
2167	11	REF	5	4	11	4	P	0
2168	11	REF	6	3	1	4	A	1
2169	11	REF	6	3	2	4	P	0
2170	11	REF	6	3	3	4	A	1
2171	11	REF	6	3	4	4	A	1
2172	11	REF	6	3	5	4	A	1
2173	11	REF	6	3	6	4	A	1
2174	11	REF	6	3	7	4	A	1
2175	11	REF	6	3	8	4	A	1
2176	11	REF	6	3	9	4	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2177	11	REF	6	3	10	4	A	1
2178	11	REF	6	3	11	4	A	1
2179	12	HMU	1	4	1	4	A	1
2180	12	HMU	1	4	2	4	P	0
2181	12	HMU	1	4	3	4	P	0
2182	12	HMU	1	4	4	4	P	0
2183	12	HMU	1	4	5	4	P	0
2184	12	HMU	1	4	6	4	P	0
2185	12	HMU	1	4	7	4	P	0
2186	12	HMU	1	4	8	4	P	0
2187	12	HMU	1	4	9	4	P	0
2188	12	HMU	1	4	10	4	P	0
2189	12	HMU	1	4	11	4	P	0
2190	12	HMU	2	6	1	4	P	0
2191	12	HMU	2	6	2	4	P	0
2192	12	HMU	2	6	3	4	P	0
2193	12	HMU	2	6	4	4	P	0
2194	12	HMU	2	6	5	4	P	0
2195	12	HMU	2	6	6	4	P	0
2196	12	HMU	2	6	7	4	P	0
2197	12	HMU	2	6	8	4	P	0
2198	12	HMU	2	6	9	4	P	0
2199	12	HMU	2	6	10	4	P	0
2200	12	HMU	2	6	11	4	P	0
2201	12	HMU	3	3	1	4	P	0
2202	12	HMU	3	3	2	4	P	0
2203	12	HMU	3	3	3	4	P	0
2204	12	HMU	3	3	4	4	P	0
2205	12	HMU	3	3	5	4	P	0
2206	12	HMU	3	3	6	4	P	0
2207	12	HMU	3	3	7	4	P	0
2208	12	HMU	3	3	8	4	P	0
2209	12	HMU	3	3	9	4	A	1
2210	12	HMU	3	3	10	4	P	0
2211	12	HMU	3	3	11	4	P	0
2212	12	HMU	4	2	1	4	P	0
2213	12	HMU	4	2	2	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2214	12	HMU	4	2	3	4	P	0
2215	12	HMU	4	2	4	4	P	0
2216	12	HMU	4	2	5	4	P	0
2217	12	HMU	4	2	6	4	P	0
2218	12	HMU	4	2	7	4	P	0
2219	12	HMU	4	2	8	4	P	0
2220	12	HMU	4	2	9	4	P	0
2221	12	HMU	4	2	10	4	P	0
2222	12	HMU	4	2	11	4	P	0
2223	12	HMU	5	9	1	4	P	0
2224	12	HMU	5	9	2	4	A	1
2225	12	HMU	5	9	3	4	P	0
2226	12	HMU	5	9	4	4	A	1
2227	12	HMU	5	9	5	4	P	0
2228	12	HMU	5	9	6	4	P	0
2229	12	HMU	5	9	7	4	P	0
2230	12	HMU	5	9	8	4	P	0
2231	12	HMU	5	9	9	4	P	0
2232	12	HMU	5	9	10	4	P	0
2233	12	HMU	5	9	11	4	P	0
2234	12	HMU	6	7	1	4	A	1
2235	12	HMU	6	7	2	4	A	1
2236	12	HMU	6	7	3	4	P	0
2237	12	HMU	6	7	4	4	A	1
2238	12	HMU	6	7	5	4	P	0
2239	12	HMU	6	7	6	4	P	0
2240	12	HMU	6	7	7	4	P	0
2241	12	HMU	6	7	8	4	P	0
2242	12	HMU	6	7	9	4	P	0
2243	12	HMU	6	7	10	4	P	0
2244	12	HMU	6	7	11	4	P	0
2245	12	MSA	1	4	1	4	A	1
2246	12	MSA	1	4	2	4	A	1
2247	12	MSA	1	4	3	4	P	0
2248	12	MSA	1	4	4	4	P	0
2249	12	MSA	1	4	5	4	P	0
2250	12	MSA	1	4	6	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2251	12	MSA	1	4	7	4	P	0
2252	12	MSA	1	4	8	4	P	0
2253	12	MSA	1	4	9	4	P	0
2254	12	MSA	1	4	10	4	P	0
2255	12	MSA	1	4	11	4	P	0
2256	12	MSA	2	6	1	4	A	1
2257	12	MSA	2	6	2	4	P	0
2258	12	MSA	2	6	3	4	P	0
2259	12	MSA	2	6	4	4	P	0
2260	12	MSA	2	6	5	4	P	0
2261	12	MSA	2	6	6	4	A	1
2262	12	MSA	2	6	7	4	P	0
2263	12	MSA	2	6	8	4	A	1
2264	12	MSA	2	6	9	4	P	0
2265	12	MSA	2	6	10	4	P	0
2266	12	MSA	2	6	11	4	A	1
2267	12	MSA	3	3	1	4	A	1
2268	12	MSA	3	3	2	4	A	1
2269	12	MSA	3	3	3	4	P	0
2270	12	MSA	3	3	4	4	P	0
2271	12	MSA	3	3	5	4	P	0
2272	12	MSA	3	3	6	4	P	0
2273	12	MSA	3	3	7	4	P	0
2274	12	MSA	3	3	8	4	P	0
2275	12	MSA	3	3	9	4	P	0
2276	12	MSA	3	3	10	4	P	0
2277	12	MSA	3	3	11	4	A	1
2278	12	MSA	4	2	1	4	P	0
2279	12	MSA	4	2	2	4	A	1
2280	12	MSA	4	2	3	4	P	0
2281	12	MSA	4	2	4	4	A	1
2282	12	MSA	4	2	5	4	P	0
2283	12	MSA	4	2	6	4	P	0
2284	12	MSA	4	2	7	4	P	0
2285	12	MSA	4	2	8	4	P	0
2286	12	MSA	4	2	9	4	P	0
2287	12	MSA	4	2	10	4	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2288	12	MSA	4	2	11	4	A	1
2289	12	MSA	5	9	1	4	P	0
2290	12	MSA	5	9	2	4	P	0
2291	12	MSA	5	9	3	4	P	0
2292	12	MSA	5	9	4	4	P	0
2293	12	MSA	5	9	5	4	P	0
2294	12	MSA	5	9	6	4	P	0
2295	12	MSA	5	9	7	4	A	1
2296	12	MSA	5	9	8	4	P	0
2297	12	MSA	5	9	9	4	P	0
2298	12	MSA	5	9	10	4	A	1
2299	12	MSA	5	9	11	4	A	1
2300	12	MSA	6	7	1	4	A	1
2301	12	MSA	6	7	2	4	A	1
2302	12	MSA	6	7	3	4	P	0
2303	12	MSA	6	7	4	4	P	0
2304	12	MSA	6	7	5	4	P	0
2305	12	MSA	6	7	6	4	P	0
2306	12	MSA	6	7	7	4	P	0
2307	12	MSA	6	7	8	4	P	0
2308	12	MSA	6	7	9	4	P	0
2309	12	MSA	6	7	10	4	P	0
2310	12	MSA	6	7	11	4	P	0
2311	12	REF	1	4	1	4	A	1
2312	12	REF	1	4	2	4	A	1
2313	12	REF	1	4	3	4	A	1
2314	12	REF	1	4	4	4	A	1
2315	12	REF	1	4	5	4	A	1
2316	12	REF	1	4	6	4	P	0
2317	12	REF	1	4	7	4	P	0
2318	12	REF	1	4	8	4	P	0
2319	12	REF	1	4	9	4	A	1
2320	12	REF	1	4	10	4	A	1
2321	12	REF	1	4	11	4	P	0
2322	12	REF	2	6	1	4	A	1
2323	12	REF	2	6	2	4	A	1
2324	12	REF	2	6	3	4	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2325	12	REF	2	6	4	4	P	0
2326	12	REF	2	6	5	4	P	0
2327	12	REF	2	6	6	4	A	1
2328	12	REF	2	6	7	4	A	1
2329	12	REF	2	6	8	4	P	0
2330	12	REF	2	6	9	4	A	1
2331	12	REF	2	6	10	4	A	1
2332	12	REF	2	6	11	4	A	1
2333	12	REF	3	3	1	4	P	0
2334	12	REF	3	3	2	4	P	0
2335	12	REF	3	3	3	4	P	0
2336	12	REF	3	3	4	4	P	0
2337	12	REF	3	3	5	4	P	0
2338	12	REF	3	3	6	4	A	1
2339	12	REF	3	3	7	4	A	1
2340	12	REF	3	3	8	4	P	0
2341	12	REF	3	3	9	4	A	1
2342	12	REF	3	3	10	4	P	0
2343	12	REF	3	3	11	4	P	0
2344	12	REF	4	2	1	4	A	1
2345	12	REF	4	2	2	4	A	1
2346	12	REF	4	2	3	4	P	0
2347	12	REF	4	2	4	4	A	1
2348	12	REF	4	2	5	4	P	0
2349	12	REF	4	2	6	4	P	0
2350	12	REF	4	2	7	4	A	1
2351	12	REF	4	2	8	4	P	0
2352	12	REF	4	2	9	4	P	0
2353	12	REF	4	2	10	4	A	1
2354	12	REF	4	2	11	4	A	1
2355	12	REF	5	9	1	4	P	0
2356	12	REF	5	9	2	4	P	0
2357	12	REF	5	9	3	4	A	1
2358	12	REF	5	9	4	4	P	0
2359	12	REF	5	9	5	4	P	0
2360	12	REF	5	9	6	4	A	1
2361	12	REF	5	9	7	4	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2362	12	REF	5	9	8	4	P	0
2363	12	REF	5	9	9	4	P	0
2364	12	REF	5	9	10	4	A	1
2365	12	REF	5	9	11	4	A	1
2366	12	REF	6	7	1	4	A	1
2367	12	REF	6	7	2	4	P	0
2368	12	REF	6	7	3	4	P	0
2369	12	REF	6	7	4	4	P	0
2370	12	REF	6	7	5	4	A	1
2371	12	REF	6	7	6	4	P	0
2372	12	REF	6	7	7	4	P	0
2373	12	REF	6	7	8	4	A	1
2374	12	REF	6	7	9	4	A	1
2375	12	REF	6	7	10	4	A	1
2376	12	REF	6	7	11	4	A	1
2377	13	HMU	1	4	1	5	P	0
2378	13	HMU	1	4	2	5	P	0
2379	13	HMU	1	4	3	5	P	0
2380	13	HMU	1	4	4	5	P	0
2381	13	HMU	1	4	5	5	P	0
2382	13	HMU	1	4	6	5	P	0
2383	13	HMU	1	4	7	5	P	0
2384	13	HMU	1	4	8	5	P	0
2385	13	HMU	1	4	9	5	P	0
2386	13	HMU	1	4	10	5	P	0
2387	13	HMU	1	4	11	5	P	0
2388	13	HMU	2	6	1	5	P	0
2389	13	HMU	2	6	2	5	P	0
2390	13	HMU	2	6	3	5	P	0
2391	13	HMU	2	6	4	5	P	0
2392	13	HMU	2	6	5	5	P	0
2393	13	HMU	2	6	6	5	P	0
2394	13	HMU	2	6	7	5	P	0
2395	13	HMU	2	6	8	5	P	0
2396	13	HMU	2	6	9	5	P	0
2397	13	HMU	2	6	10	5	P	0
2398	13	HMU	2	6	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2399	13	HMU	3	1	1	5	A	1
2400	13	HMU	3	1	2	5	P	0
2401	13	HMU	3	1	3	5	P	0
2402	13	HMU	3	1	4	5	P	0
2403	13	HMU	3	1	5	5	P	0
2404	13	HMU	3	1	6	5	P	0
2405	13	HMU	3	1	7	5	P	0
2406	13	HMU	3	1	8	5	P	0
2407	13	HMU	3	1	9	5	P	0
2408	13	HMU	3	1	10	5	P	0
2409	13	HMU	3	1	11	5	P	0
2410	13	HMU	4	3	1	5	P	0
2411	13	HMU	4	3	2	5	P	0
2412	13	HMU	4	3	3	5	P	0
2413	13	HMU	4	3	4	5	P	0
2414	13	HMU	4	3	5	5	P	0
2415	13	HMU	4	3	6	5	P	0
2416	13	HMU	4	3	7	5	P	0
2417	13	HMU	4	3	8	5	P	0
2418	13	HMU	4	3	9	5	P	0
2419	13	HMU	4	3	10	5	P	0
2420	13	HMU	4	3	11	5	P	0
2421	13	HMU	5	7	1	5	P	0
2422	13	HMU	5	7	2	5	P	0
2423	13	HMU	5	7	3	5	P	0
2424	13	HMU	5	7	4	5	P	0
2425	13	HMU	5	7	5	5	P	0
2426	13	HMU	5	7	6	5	P	0
2427	13	HMU	5	7	7	5	P	0
2428	13	HMU	5	7	8	5	P	0
2429	13	HMU	5	7	9	5	P	0
2430	13	HMU	5	7	10	5	P	0
2431	13	HMU	5	7	11	5	P	0
2432	13	HMU	6	8	1	5	P	0
2433	13	HMU	6	8	2	5	P	0
2434	13	HMU	6	8	3	5	P	0
2435	13	HMU	6	8	4	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2436	13	HMU	6	8	5	5	P	0
2437	13	HMU	6	8	6	5	P	0
2438	13	HMU	6	8	7	5	P	0
2439	13	HMU	6	8	8	5	P	0
2440	13	HMU	6	8	9	5	P	0
2441	13	HMU	6	8	10	5	P	0
2442	13	HMU	6	8	11	5	P	0
2443	13	MSA	1	4	1	5	P	0
2444	13	MSA	1	4	2	5	P	0
2445	13	MSA	1	4	3	5	P	0
2446	13	MSA	1	4	4	5	P	0
2447	13	MSA	1	4	5	5	P	0
2448	13	MSA	1	4	6	5	P	0
2449	13	MSA	1	4	7	5	P	0
2450	13	MSA	1	4	8	5	P	0
2451	13	MSA	1	4	9	5	P	0
2452	13	MSA	1	4	10	5	P	0
2453	13	MSA	1	4	11	5	P	0
2454	13	MSA	2	6	1	5	P	0
2455	13	MSA	2	6	2	5	P	0
2456	13	MSA	2	6	3	5	P	0
2457	13	MSA	2	6	4	5	P	0
2458	13	MSA	2	6	5	5	P	0
2459	13	MSA	2	6	6	5	P	0
2460	13	MSA	2	6	7	5	P	0
2461	13	MSA	2	6	8	5	P	0
2462	13	MSA	2	6	9	5	P	0
2463	13	MSA	2	6	10	5	P	0
2464	13	MSA	2	6	11	5	P	0
2465	13	MSA	3	1	1	5	P	0
2466	13	MSA	3	1	2	5	A	1
2467	13	MSA	3	1	3	5	A	1
2468	13	MSA	3	1	4	5	P	0
2469	13	MSA	3	1	5	5	P	0
2470	13	MSA	3	1	6	5	P	0
2471	13	MSA	3	1	7	5	P	0
2472	13	MSA	3	1	8	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2473	13	MSA	3	1	9	5	P	0
2474	13	MSA	3	1	10	5	P	0
2475	13	MSA	3	1	11	5	P	0
2476	13	MSA	4	3	1	5	P	0
2477	13	MSA	4	3	2	5	P	0
2478	13	MSA	4	3	3	5	P	0
2479	13	MSA	4	3	4	5	P	0
2480	13	MSA	4	3	5	5	P	0
2481	13	MSA	4	3	6	5	P	0
2482	13	MSA	4	3	7	5	P	0
2483	13	MSA	4	3	8	5	P	0
2484	13	MSA	4	3	9	5	A	1
2485	13	MSA	4	3	10	5	P	0
2486	13	MSA	4	3	11	5	P	0
2487	13	MSA	5	7	1	5	P	0
2488	13	MSA	5	7	2	5	P	0
2489	13	MSA	5	7	3	5	P	0
2490	13	MSA	5	7	4	5	P	0
2491	13	MSA	5	7	5	5	P	0
2492	13	MSA	5	7	6	5	P	0
2493	13	MSA	5	7	7	5	P	0
2494	13	MSA	5	7	8	5	P	0
2495	13	MSA	5	7	9	5	P	0
2496	13	MSA	5	7	10	5	P	0
2497	13	MSA	5	7	11	5	P	0
2498	13	MSA	6	8	1	5	A	1
2499	13	MSA	6	8	2	5	P	0
2500	13	MSA	6	8	3	5	P	0
2501	13	MSA	6	8	4	5	P	0
2502	13	MSA	6	8	5	5	P	0
2503	13	MSA	6	8	6	5	P	0
2504	13	MSA	6	8	7	5	P	0
2505	13	MSA	6	8	8	5	P	0
2506	13	MSA	6	8	9	5	P	0
2507	13	MSA	6	8	10	5	P	0
2508	13	MSA	6	8	11	5	P	0
2509	13	REF	1	4	1	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2510	13	REF	1	4	2	5	A	1
2511	13	REF	1	4	3	5	P	0
2512	13	REF	1	4	4	5	A	1
2513	13	REF	1	4	5	5	P	0
2514	13	REF	1	4	6	5	P	0
2515	13	REF	1	4	7	5	A	1
2516	13	REF	1	4	8	5	P	0
2517	13	REF	1	4	9	5	P	0
2518	13	REF	1	4	10	5	P	0
2519	13	REF	1	4	11	5	A	1
2520	13	REF	2	6	1	5	A	1
2521	13	REF	2	6	2	5	P	0
2522	13	REF	2	6	3	5	A	1
2523	13	REF	2	6	4	5	A	1
2524	13	REF	2	6	5	5	A	1
2525	13	REF	2	6	6	5	A	1
2526	13	REF	2	6	7	5	A	1
2527	13	REF	2	6	8	5	A	1
2528	13	REF	2	6	9	5	A	1
2529	13	REF	2	6	10	5	A	1
2530	13	REF	2	6	11	5	P	0
2531	13	REF	3	1	1	5	P	0
2532	13	REF	3	1	2	5	A	1
2533	13	REF	3	1	3	5	A	1
2534	13	REF	3	1	4	5	P	0
2535	13	REF	3	1	5	5	A	1
2536	13	REF	3	1	6	5	P	0
2537	13	REF	3	1	7	5	A	1
2538	13	REF	3	1	8	5	A	1
2539	13	REF	3	1	9	5	A	1
2540	13	REF	3	1	10	5	A	1
2541	13	REF	3	1	11	5	P	0
2542	13	REF	4	3	1	5	A	1
2543	13	REF	4	3	2	5	P	0
2544	13	REF	4	3	3	5	A	1
2545	13	REF	4	3	4	5	P	0
2546	13	REF	4	3	5	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2547	13	REF	4	3	6	5	P	0
2548	13	REF	4	3	7	5	P	0
2549	13	REF	4	3	8	5	A	1
2550	13	REF	4	3	9	5	P	0
2551	13	REF	4	3	10	5	P	0
2552	13	REF	4	3	11	5	P	0
2553	13	REF	5	7	1	5	A	1
2554	13	REF	5	7	2	5	A	1
2555	13	REF	5	7	3	5	P	0
2556	13	REF	5	7	4	5	P	0
2557	13	REF	5	7	5	5	P	0
2558	13	REF	5	7	6	5	P	0
2559	13	REF	5	7	7	5	A	1
2560	13	REF	5	7	8	5	A	1
2561	13	REF	5	7	9	5	P	0
2562	13	REF	5	7	10	5	A	1
2563	13	REF	5	7	11	5	A	1
2564	13	REF	6	8	1	5	P	0
2565	13	REF	6	8	2	5	A	1
2566	13	REF	6	8	3	5	A	1
2567	13	REF	6	8	4	5	P	0
2568	13	REF	6	8	5	5	P	0
2569	13	REF	6	8	6	5	A	1
2570	13	REF	6	8	7	5	A	1
2571	13	REF	6	8	8	5	A	1
2572	13	REF	6	8	9	5	A	1
2573	13	REF	6	8	10	5	P	0
2574	13	REF	6	8	11	5	A	1
2575	14	HMU	1	3	1	5	P	0
2576	14	HMU	1	3	2	5	P	0
2577	14	HMU	1	3	3	5	P	0
2578	14	HMU	1	3	4	5	P	0
2579	14	HMU	1	3	5	5	P	0
2580	14	HMU	1	3	6	5	P	0
2581	14	HMU	1	3	7	5	P	0
2582	14	HMU	1	3	8	5	P	0
2583	14	HMU	1	3	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2584	14	HMU	1	3	10	5	A	1
2585	14	HMU	1	3	11	5	P	0
2586	14	HMU	2	4	1	5	P	0
2587	14	HMU	2	4	2	5	P	0
2588	14	HMU	2	4	3	5	P	0
2589	14	HMU	2	4	4	5	A	1
2590	14	HMU	2	4	5	5	P	0
2591	14	HMU	2	4	6	5	A	1
2592	14	HMU	2	4	7	5	P	0
2593	14	HMU	2	4	8	5	P	0
2594	14	HMU	2	4	9	5	P	0
2595	14	HMU	2	4	10	5	P	0
2596	14	HMU	2	4	11	5	P	0
2597	14	HMU	3	8	1	5	A	1
2598	14	HMU	3	8	2	5	A	1
2599	14	HMU	3	8	3	5	P	0
2600	14	HMU	3	8	4	5	P	0
2601	14	HMU	3	8	5	5	P	0
2602	14	HMU	3	8	6	5	P	0
2603	14	HMU	3	8	7	5	P	0
2604	14	HMU	3	8	8	5	P	0
2605	14	HMU	3	8	9	5	P	0
2606	14	HMU	3	8	10	5	P	0
2607	14	HMU	3	8	11	5	P	0
2608	14	HMU	4	2	1	5	P	0
2609	14	HMU	4	2	2	5	P	0
2610	14	HMU	4	2	3	5	P	0
2611	14	HMU	4	2	4	5	P	0
2612	14	HMU	4	2	5	5	P	0
2613	14	HMU	4	2	6	5	P	0
2614	14	HMU	4	2	7	5	P	0
2615	14	HMU	4	2	8	5	P	0
2616	14	HMU	4	2	9	5	P	0
2617	14	HMU	4	2	10	5	P	0
2618	14	HMU	4	2	11	5	P	0
2619	14	HMU	5	1	1	5	P	0
2620	14	HMU	5	1	2	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2621	14	HMU	5	1	3	5	P	0
2622	14	HMU	5	1	4	5	P	0
2623	14	HMU	5	1	5	5	P	0
2624	14	HMU	5	1	6	5	P	0
2625	14	HMU	5	1	7	5	P	0
2626	14	HMU	5	1	8	5	P	0
2627	14	HMU	5	1	9	5	P	0
2628	14	HMU	5	1	10	5	P	0
2629	14	HMU	5	1	11	5	P	0
2630	14	HMU	6	5	1	5	P	0
2631	14	HMU	6	5	2	5	P	0
2632	14	HMU	6	5	3	5	P	0
2633	14	HMU	6	5	4	5	P	0
2634	14	HMU	6	5	5	5	P	0
2635	14	HMU	6	5	6	5	P	0
2636	14	HMU	6	5	7	5	P	0
2637	14	HMU	6	5	8	5	P	0
2638	14	HMU	6	5	9	5	P	0
2639	14	HMU	6	5	10	5	P	0
2640	14	HMU	6	5	11	5	P	0
2641	14	MSA	1	3	1	5	P	0
2642	14	MSA	1	3	2	5	P	0
2643	14	MSA	1	3	3	5	P	0
2644	14	MSA	1	3	4	5	P	0
2645	14	MSA	1	3	5	5	P	0
2646	14	MSA	1	3	6	5	P	0
2647	14	MSA	1	3	7	5	P	0
2648	14	MSA	1	3	8	5	P	0
2649	14	MSA	1	3	9	5	P	0
2650	14	MSA	1	3	10	5	P	0
2651	14	MSA	1	3	11	5	P	0
2652	14	MSA	2	4	1	5	P	0
2653	14	MSA	2	4	2	5	A	1
2654	14	MSA	2	4	3	5	P	0
2655	14	MSA	2	4	4	5	P	0
2656	14	MSA	2	4	5	5	P	0
2657	14	MSA	2	4	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2658	14	MSA	2	4	7	5	P	0
2659	14	MSA	2	4	8	5	P	0
2660	14	MSA	2	4	9	5	P	0
2661	14	MSA	2	4	10	5	P	0
2662	14	MSA	2	4	11	5	P	0
2663	14	MSA	3	8	1	5	P	0
2664	14	MSA	3	8	2	5	P	0
2665	14	MSA	3	8	3	5	P	0
2666	14	MSA	3	8	4	5	P	0
2667	14	MSA	3	8	5	5	P	0
2668	14	MSA	3	8	6	5	P	0
2669	14	MSA	3	8	7	5	P	0
2670	14	MSA	3	8	8	5	P	0
2671	14	MSA	3	8	9	5	P	0
2672	14	MSA	3	8	10	5	P	0
2673	14	MSA	3	8	11	5	P	0
2674	14	MSA	4	2	1	5	P	0
2675	14	MSA	4	2	2	5	A	1
2676	14	MSA	4	2	3	5	P	0
2677	14	MSA	4	2	4	5	P	0
2678	14	MSA	4	2	5	5	P	0
2679	14	MSA	4	2	6	5	P	0
2680	14	MSA	4	2	7	5	P	0
2681	14	MSA	4	2	8	5	P	0
2682	14	MSA	4	2	9	5	P	0
2683	14	MSA	4	2	10	5	P	0
2684	14	MSA	4	2	11	5	P	0
2685	14	MSA	5	1	1	5	P	0
2686	14	MSA	5	1	2	5	P	0
2687	14	MSA	5	1	3	5	P	0
2688	14	MSA	5	1	4	5	P	0
2689	14	MSA	5	1	5	5	P	0
2690	14	MSA	5	1	6	5	P	0
2691	14	MSA	5	1	7	5	P	0
2692	14	MSA	5	1	8	5	P	0
2693	14	MSA	5	1	9	5	P	0
2694	14	MSA	5	1	10	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2695	14	MSA	5	1	11	5	P	0
2696	14	MSA	6	5	1	5	P	0
2697	14	MSA	6	5	2	5	P	0
2698	14	MSA	6	5	3	5	P	0
2699	14	MSA	6	5	4	5	P	0
2700	14	MSA	6	5	5	5	P	0
2701	14	MSA	6	5	6	5	P	0
2702	14	MSA	6	5	7	5	P	0
2703	14	MSA	6	5	8	5	P	0
2704	14	MSA	6	5	9	5	P	0
2705	14	MSA	6	5	10	5	P	0
2706	14	MSA	6	5	11	5	P	0
2707	14	REF	1	3	1	5	P	0
2708	14	REF	1	3	2	5	P	0
2709	14	REF	1	3	3	5	P	0
2710	14	REF	1	3	4	5	A	1
2711	14	REF	1	3	5	5	A	1
2712	14	REF	1	3	6	5	A	1
2713	14	REF	1	3	7	5	P	0
2714	14	REF	1	3	8	5	P	0
2715	14	REF	1	3	9	5	P	0
2716	14	REF	1	3	10	5	P	0
2717	14	REF	1	3	11	5	P	0
2718	14	REF	2	4	1	5	A	1
2719	14	REF	2	4	2	5	A	1
2720	14	REF	2	4	3	5	P	0
2721	14	REF	2	4	4	5	A	1
2722	14	REF	2	4	5	5	P	0
2723	14	REF	2	4	6	5	P	0
2724	14	REF	2	4	7	5	P	0
2725	14	REF	2	4	8	5	A	1
2726	14	REF	2	4	9	5	A	1
2727	14	REF	2	4	10	5	P	0
2728	14	REF	2	4	11	5	A	1
2729	14	REF	3	8	1	5	P	0
2730	14	REF	3	8	2	5	A	1
2731	14	REF	3	8	3	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2732	14	REF	3	8	4	5	P	0
2733	14	REF	3	8	5	5	P	0
2734	14	REF	3	8	6	5	P	0
2735	14	REF	3	8	7	5	P	0
2736	14	REF	3	8	8	5	A	1
2737	14	REF	3	8	9	5	P	0
2738	14	REF	3	8	10	5	P	0
2739	14	REF	3	8	11	5	P	0
2740	14	REF	4	2	1	5	A	1
2741	14	REF	4	2	2	5	P	0
2742	14	REF	4	2	3	5	P	0
2743	14	REF	4	2	4	5	A	1
2744	14	REF	4	2	5	5	A	1
2745	14	REF	4	2	6	5	A	1
2746	14	REF	4	2	7	5	P	0
2747	14	REF	4	2	8	5	P	0
2748	14	REF	4	2	9	5	A	1
2749	14	REF	4	2	10	5	P	0
2750	14	REF	4	2	11	5	A	1
2751	14	REF	5	1	1	5	P	0
2752	14	REF	5	1	2	5	A	1
2753	14	REF	5	1	3	5	P	0
2754	14	REF	5	1	4	5	A	1
2755	14	REF	5	1	5	5	P	0
2756	14	REF	5	1	6	5	P	0
2757	14	REF	5	1	7	5	P	0
2758	14	REF	5	1	8	5	P	0
2759	14	REF	5	1	9	5	P	0
2760	14	REF	5	1	10	5	A	1
2761	14	REF	5	1	11	5	P	0
2762	14	REF	6	5	1	5	P	0
2763	14	REF	6	5	2	5	P	0
2764	14	REF	6	5	3	5	P	0
2765	14	REF	6	5	4	5	P	0
2766	14	REF	6	5	5	5	P	0
2767	14	REF	6	5	6	5	A	1
2768	14	REF	6	5	7	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2769	14	REF	6	5	8	5	P	0
2770	14	REF	6	5	9	5	P	0
2771	14	REF	6	5	10	5	P	0
2772	14	REF	6	5	11	5	P	0
2773	15	HMU	1	5	1	5	P	0
2774	15	HMU	1	5	2	5	P	0
2775	15	HMU	1	5	3	5	A	1
2776	15	HMU	1	5	4	5	A	1
2777	15	HMU	1	5	5	5	P	0
2778	15	HMU	1	5	6	5	P	0
2779	15	HMU	1	5	7	5	P	0
2780	15	HMU	1	5	8	5	P	0
2781	15	HMU	1	5	9	5	P	0
2782	15	HMU	1	5	10	5	P	0
2783	15	HMU	1	5	11	5	P	0
2784	15	HMU	2	4	1	5	A	1
2785	15	HMU	2	4	2	5	A	1
2786	15	HMU	2	4	3	5	P	0
2787	15	HMU	2	4	4	5	P	0
2788	15	HMU	2	4	5	5	P	0
2789	15	HMU	2	4	6	5	P	0
2790	15	HMU	2	4	7	5	P	0
2791	15	HMU	2	4	8	5	P	0
2792	15	HMU	2	4	9	5	P	0
2793	15	HMU	2	4	10	5	P	0
2794	15	HMU	2	4	11	5	P	0
2795	15	HMU	3	8	1	5	A	1
2796	15	HMU	3	8	2	5	P	0
2797	15	HMU	3	8	3	5	P	0
2798	15	HMU	3	8	4	5	P	0
2799	15	HMU	3	8	5	5	P	0
2800	15	HMU	3	8	6	5	P	0
2801	15	HMU	3	8	7	5	A	1
2802	15	HMU	3	8	8	5	P	0
2803	15	HMU	3	8	9	5	P	0
2804	15	HMU	3	8	10	5	P	0
2805	15	HMU	3	8	11	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2806	15	HMU	4	1	1	5	P	0
2807	15	HMU	4	1	2	5	P	0
2808	15	HMU	4	1	3	5	P	0
2809	15	HMU	4	1	4	5	P	0
2810	15	HMU	4	1	5	5	P	0
2811	15	HMU	4	1	6	5	P	0
2812	15	HMU	4	1	7	5	P	0
2813	15	HMU	4	1	8	5	P	0
2814	15	HMU	4	1	9	5	P	0
2815	15	HMU	4	1	10	5	P	0
2816	15	HMU	4	1	11	5	P	0
2817	15	HMU	5	9	1	5	A	1
2818	15	HMU	5	9	2	5	A	1
2819	15	HMU	5	9	3	5	P	0
2820	15	HMU	5	9	4	5	P	0
2821	15	HMU	5	9	5	5	P	0
2822	15	HMU	5	9	6	5	P	0
2823	15	HMU	5	9	7	5	P	0
2824	15	HMU	5	9	8	5	P	0
2825	15	HMU	5	9	9	5	P	0
2826	15	HMU	5	9	10	5	P	0
2827	15	HMU	5	9	11	5	P	0
2828	15	HMU	6	7	1	5	A	1
2829	15	HMU	6	7	2	5	A	1
2830	15	HMU	6	7	3	5	P	0
2831	15	HMU	6	7	4	5	P	0
2832	15	HMU	6	7	5	5	P	0
2833	15	HMU	6	7	6	5	P	0
2834	15	HMU	6	7	7	5	P	0
2835	15	HMU	6	7	8	5	P	0
2836	15	HMU	6	7	9	5	P	0
2837	15	HMU	6	7	10	5	P	0
2838	15	HMU	6	7	11	5	P	0
2839	15	MSA	1	5	1	5	A	1
2840	15	MSA	1	5	2	5	A	1
2841	15	MSA	1	5	3	5	P	0
2842	15	MSA	1	5	4	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2843	15	MSA	1	5	5	5	P	0
2844	15	MSA	1	5	6	5	A	1
2845	15	MSA	1	5	7	5	A	1
2846	15	MSA	1	5	8	5	P	0
2847	15	MSA	1	5	9	5	P	0
2848	15	MSA	1	5	10	5	P	0
2849	15	MSA	1	5	11	5	P	0
2850	15	MSA	2	4	1	5	P	0
2851	15	MSA	2	4	2	5	P	0
2852	15	MSA	2	4	3	5	P	0
2853	15	MSA	2	4	4	5	P	0
2854	15	MSA	2	4	5	5	P	0
2855	15	MSA	2	4	6	5	P	0
2856	15	MSA	2	4	7	5	A	1
2857	15	MSA	2	4	8	5	P	0
2858	15	MSA	2	4	9	5	P	0
2859	15	MSA	2	4	10	5	P	0
2860	15	MSA	2	4	11	5	P	0
2861	15	MSA	3	8	1	5	P	0
2862	15	MSA	3	8	2	5	P	0
2863	15	MSA	3	8	3	5	P	0
2864	15	MSA	3	8	4	5	P	0
2865	15	MSA	3	8	5	5	P	0
2866	15	MSA	3	8	6	5	P	0
2867	15	MSA	3	8	7	5	P	0
2868	15	MSA	3	8	8	5	P	0
2869	15	MSA	3	8	9	5	P	0
2870	15	MSA	3	8	10	5	P	0
2871	15	MSA	3	8	11	5	P	0
2872	15	MSA	4	1	1	5	P	0
2873	15	MSA	4	1	2	5	P	0
2874	15	MSA	4	1	3	5	P	0
2875	15	MSA	4	1	4	5	P	0
2876	15	MSA	4	1	5	5	P	0
2877	15	MSA	4	1	6	5	A	1
2878	15	MSA	4	1	7	5	P	0
2879	15	MSA	4	1	8	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2880	15	MSA	4	1	9	5	P	0
2881	15	MSA	4	1	10	5	A	1
2882	15	MSA	4	1	11	5	A	1
2883	15	MSA	5	9	1	5	P	0
2884	15	MSA	5	9	2	5	P	0
2885	15	MSA	5	9	3	5	P	0
2886	15	MSA	5	9	4	5	P	0
2887	15	MSA	5	9	5	5	P	0
2888	15	MSA	5	9	6	5	P	0
2889	15	MSA	5	9	7	5	P	0
2890	15	MSA	5	9	8	5	P	0
2891	15	MSA	5	9	9	5	P	0
2892	15	MSA	5	9	10	5	A	1
2893	15	MSA	5	9	11	5	P	0
2894	15	MSA	6	7	1	5	A	1
2895	15	MSA	6	7	2	5	P	0
2896	15	MSA	6	7	3	5	P	0
2897	15	MSA	6	7	4	5	P	0
2898	15	MSA	6	7	5	5	P	0
2899	15	MSA	6	7	6	5	P	0
2900	15	MSA	6	7	7	5	P	0
2901	15	MSA	6	7	8	5	P	0
2902	15	MSA	6	7	9	5	A	1
2903	15	MSA	6	7	10	5	P	0
2904	15	MSA	6	7	11	5	P	0
2905	15	REF	1	5	1	5	A	1
2906	15	REF	1	5	2	5	A	1
2907	15	REF	1	5	3	5	A	1
2908	15	REF	1	5	4	5	A	1
2909	15	REF	1	5	5	5	A	1
2910	15	REF	1	5	6	5	A	1
2911	15	REF	1	5	7	5	P	0
2912	15	REF	1	5	8	5	A	1
2913	15	REF	1	5	9	5	A	1
2914	15	REF	1	5	10	5	A	1
2915	15	REF	1	5	11	5	A	1
2916	15	REF	2	4	1	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2917	15	REF	2	4	2	5	A	1
2918	15	REF	2	4	3	5	A	1
2919	15	REF	2	4	4	5	P	0
2920	15	REF	2	4	5	5	A	1
2921	15	REF	2	4	6	5	A	1
2922	15	REF	2	4	7	5	A	1
2923	15	REF	2	4	8	5	A	1
2924	15	REF	2	4	9	5	A	1
2925	15	REF	2	4	10	5	P	0
2926	15	REF	2	4	11	5	P	0
2927	15	REF	3	8	1	5	A	1
2928	15	REF	3	8	2	5	P	0
2929	15	REF	3	8	3	5	A	1
2930	15	REF	3	8	4	5		.
2931	15	REF	3	8	5	5		.
2932	15	REF	3	8	6	5		.
2933	15	REF	3	8	7	5		.
2934	15	REF	3	8	8	5		.
2935	15	REF	3	8	9	5		.
2936	15	REF	3	8	10	5	A	1
2937	15	REF	3	8	11	5	A	1
2938	15	REF	4	1	1	5	A	1
2939	15	REF	4	1	2	5	P	0
2940	15	REF	4	1	3	5	P	0
2941	15	REF	4	1	4	5	A	1
2942	15	REF	4	1	5	5	A	1
2943	15	REF	4	1	6	5	A	1
2944	15	REF	4	1	7	5	A	1
2945	15	REF	4	1	8	5	A	1
2946	15	REF	4	1	9	5	A	1
2947	15	REF	4	1	10	5	P	0
2948	15	REF	4	1	11	5	P	0
2949	15	REF	5	9	1	5	A	1
2950	15	REF	5	9	2	5	A	1
2951	15	REF	5	9	3	5	A	1
2952	15	REF	5	9	4	5	A	1
2953	15	REF	5	9	5	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2954	15	REF	5	9	6	5	A	1
2955	15	REF	5	9	7	5	A	1
2956	15	REF	5	9	8	5	A	1
2957	15	REF	5	9	9	5	A	1
2958	15	REF	5	9	10	5	P	0
2959	15	REF	5	9	11	5	A	1
2960	15	REF	6	7	1	5	A	1
2961	15	REF	6	7	2	5	P	0
2962	15	REF	6	7	3	5	A	1
2963	15	REF	6	7	4	5	P	0
2964	15	REF	6	7	5	5	A	1
2965	15	REF	6	7	6	5	P	0
2966	15	REF	6	7	7	5	A	1
2967	15	REF	6	7	8	5	A	1
2968	15	REF	6	7	9	5	A	1
2969	15	REF	6	7	10	5	A	1
2970	15	REF	6	7	11	5	A	1
2971	16	HMU	1	8	1	5	P	0
2972	16	HMU	1	8	2	5	P	0
2973	16	HMU	1	8	3	5	P	0
2974	16	HMU	1	8	4	5	P	0
2975	16	HMU	1	8	5	5	P	0
2976	16	HMU	1	8	6	5	P	0
2977	16	HMU	1	8	7	5	P	0
2978	16	HMU	1	8	8	5	P	0
2979	16	HMU	1	8	9	5	P	0
2980	16	HMU	1	8	10	5	P	0
2981	16	HMU	1	8	11	5	P	0
2982	16	HMU	2	3	1	5	P	0
2983	16	HMU	2	3	2	5	A	1
2984	16	HMU	2	3	3	5	P	0
2985	16	HMU	2	3	4	5	P	0
2986	16	HMU	2	3	5	5	P	0
2987	16	HMU	2	3	6	5	P	0
2988	16	HMU	2	3	7	5	P	0
2989	16	HMU	2	3	8	5	P	0
2990	16	HMU	2	3	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
2991	16	HMU	2	3	10	5	P	0
2992	16	HMU	2	3	11	5	P	0
2993	16	HMU	3	6	1	5	P	0
2994	16	HMU	3	6	2	5	P	0
2995	16	HMU	3	6	3	5	P	0
2996	16	HMU	3	6	4	5	P	0
2997	16	HMU	3	6	5	5	P	0
2998	16	HMU	3	6	6	5	P	0
2999	16	HMU	3	6	7	5	P	0
3000	16	HMU	3	6	8	5	P	0
3001	16	HMU	3	6	9	5	P	0
3002	16	HMU	3	6	10	5	P	0
3003	16	HMU	3	6	11	5	A	1
3004	16	HMU	4	5	1	5	P	0
3005	16	HMU	4	5	2	5	P	0
3006	16	HMU	4	5	3	5	P	0
3007	16	HMU	4	5	4	5	P	0
3008	16	HMU	4	5	5	5	A	1
3009	16	HMU	4	5	6	5	P	0
3010	16	HMU	4	5	7	5	P	0
3011	16	HMU	4	5	8	5	P	0
3012	16	HMU	4	5	9	5	P	0
3013	16	HMU	4	5	10	5	P	0
3014	16	HMU	4	5	11	5	P	0
3015	16	HMU	5	9	1	5	P	0
3016	16	HMU	5	9	2	5	N	.
3017	16	HMU	5	9	3	5	P	0
3018	16	HMU	5	9	4	5	N	.
3019	16	HMU	5	9	5	5	P	0
3020	16	HMU	5	9	6	5	P	0
3021	16	HMU	5	9	7	5	P	0
3022	16	HMU	5	9	8	5	P	0
3023	16	HMU	5	9	9	5	P	0
3024	16	HMU	5	9	10	5	P	0
3025	16	HMU	5	9	11	5	P	0
3026	16	HMU	6	7	1	5	P	0
3027	16	HMU	6	7	2	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3028	16	HMU	6	7	3	5	P	0
3029	16	HMU	6	7	4	5	P	0
3030	16	HMU	6	7	5	5	P	0
3031	16	HMU	6	7	6	5	P	0
3032	16	HMU	6	7	7	5	P	0
3033	16	HMU	6	7	8	5	P	0
3034	16	HMU	6	7	9	5	P	0
3035	16	HMU	6	7	10	5	P	0
3036	16	HMU	6	7	11	5	P	0
3037	16	MSA	1	8	1	5	A	1
3038	16	MSA	1	8	2	5	A	1
3039	16	MSA	1	8	3	5	A	1
3040	16	MSA	1	8	4	5	P	0
3041	16	MSA	1	8	5	5	P	0
3042	16	MSA	1	8	6	5	P	0
3043	16	MSA	1	8	7	5	A	1
3044	16	MSA	1	8	8	5	P	0
3045	16	MSA	1	8	9	5	P	0
3046	16	MSA	1	8	10	5	P	0
3047	16	MSA	1	8	11	5	P	0
3048	16	MSA	2	3	1	5	P	0
3049	16	MSA	2	3	2	5	P	0
3050	16	MSA	2	3	3	5	P	0
3051	16	MSA	2	3	4	5	P	0
3052	16	MSA	2	3	5	5	P	0
3053	16	MSA	2	3	6	5	P	0
3054	16	MSA	2	3	7	5	P	0
3055	16	MSA	2	3	8	5	P	0
3056	16	MSA	2	3	9	5	A	1
3057	16	MSA	2	3	10	5	P	0
3058	16	MSA	2	3	11	5	P	0
3059	16	MSA	3	6	1	5	A	1
3060	16	MSA	3	6	2	5	P	0
3061	16	MSA	3	6	3	5	A	1
3062	16	MSA	3	6	4	5	P	0
3063	16	MSA	3	6	5	5	P	0
3064	16	MSA	3	6	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3065	16	MSA	3	6	7	5	P	0
3066	16	MSA	3	6	8	5	P	0
3067	16	MSA	3	6	9	5	A	1
3068	16	MSA	3	6	10	5	P	0
3069	16	MSA	3	6	11	5	P	0
3070	16	MSA	4	5	1	5	P	0
3071	16	MSA	4	5	2	5	A	1
3072	16	MSA	4	5	3	5	P	0
3073	16	MSA	4	5	4	5	P	0
3074	16	MSA	4	5	5	5	P	0
3075	16	MSA	4	5	6	5	A	1
3076	16	MSA	4	5	7	5	P	0
3077	16	MSA	4	5	8	5	P	0
3078	16	MSA	4	5	9	5	P	0
3079	16	MSA	4	5	10	5	P	0
3080	16	MSA	4	5	11	5	P	0
3081	16	MSA	5	9	1	5	P	0
3082	16	MSA	5	9	2	5	P	0
3083	16	MSA	5	9	3	5	P	0
3084	16	MSA	5	9	4	5	A	1
3085	16	MSA	5	9	5	5	A	1
3086	16	MSA	5	9	6	5	P	0
3087	16	MSA	5	9	7	5	P	0
3088	16	MSA	5	9	8	5	P	0
3089	16	MSA	5	9	9	5	P	0
3090	16	MSA	5	9	10	5	A	1
3091	16	MSA	5	9	11	5	P	0
3092	16	MSA	6	7	1	5	P	0
3093	16	MSA	6	7	2	5	P	0
3094	16	MSA	6	7	3	5	P	0
3095	16	MSA	6	7	4	5	P	0
3096	16	MSA	6	7	5	5	P	0
3097	16	MSA	6	7	6	5	P	0
3098	16	MSA	6	7	7	5	P	0
3099	16	MSA	6	7	8	5	P	0
3100	16	MSA	6	7	9	5	A	1
3101	16	MSA	6	7	10	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3102	16	MSA	6	7	11	5	A	1
3103	16	REF	1	8	1	5	A	1
3104	16	REF	1	8	2	5	A	1
3105	16	REF	1	8	3	5	A	1
3106	16	REF	1	8	4	5	P	0
3107	16	REF	1	8	5	5	P	0
3108	16	REF	1	8	6	5	A	1
3109	16	REF	1	8	7	5	A	1
3110	16	REF	1	8	8	5	A	1
3111	16	REF	1	8	9	5	A	1
3112	16	REF	1	8	10	5	A	1
3113	16	REF	1	8	11	5	A	1
3114	16	REF	2	3	1	5	A	1
3115	16	REF	2	3	2	5	A	1
3116	16	REF	2	3	3	5	A	1
3117	16	REF	2	3	4	5	A	1
3118	16	REF	2	3	5	5	A	1
3119	16	REF	2	3	6	5	A	1
3120	16	REF	2	3	7	5	A	1
3121	16	REF	2	3	8	5	A	1
3122	16	REF	2	3	9	5	A	1
3123	16	REF	2	3	10	5	A	1
3124	16	REF	2	3	11	5	A	1
3125	16	REF	3	6	1	5	A	1
3126	16	REF	3	6	2	5	P	0
3127	16	REF	3	6	3	5	A	1
3128	16	REF	3	6	4	5	P	0
3129	16	REF	3	6	5	5	P	0
3130	16	REF	3	6	6	5	P	0
3131	16	REF	3	6	7	5	P	0
3132	16	REF	3	6	8	5	P	0
3133	16	REF	3	6	9	5	A	1
3134	16	REF	3	6	10	5	A	1
3135	16	REF	3	6	11	5	P	0
3136	16	REF	4	5	1	5	A	1
3137	16	REF	4	5	2	5	P	0
3138	16	REF	4	5	3	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3139	16	REF	4	5	4	5	P	0
3140	16	REF	4	5	5	5	A	1
3141	16	REF	4	5	6	5	P	0
3142	16	REF	4	5	7	5	A	1
3143	16	REF	4	5	8	5	P	0
3144	16	REF	4	5	9	5	P	0
3145	16	REF	4	5	10	5	P	0
3146	16	REF	4	5	11	5	A	1
3147	16	REF	5	9	1	5	A	1
3148	16	REF	5	9	2	5	P	0
3149	16	REF	5	9	3	5	P	0
3150	16	REF	5	9	4	5	P	0
3151	16	REF	5	9	5	5	P	0
3152	16	REF	5	9	6	5	P	0
3153	16	REF	5	9	7	5	P	0
3154	16	REF	5	9	8	5	A	1
3155	16	REF	5	9	9	5	A	1
3156	16	REF	5	9	10	5	A	1
3157	16	REF	5	9	11	5	P	0
3158	16	REF	6	7	1	5	P	0
3159	16	REF	6	7	2	5	P	0
3160	16	REF	6	7	3	5	P	0
3161	16	REF	6	7	4	5	P	0
3162	16	REF	6	7	5	5	P	0
3163	16	REF	6	7	6	5	P	0
3164	16	REF	6	7	7	5	P	0
3165	16	REF	6	7	8	5	A	1
3166	16	REF	6	7	9	5	A	1
3167	16	REF	6	7	10	5	A	1
3168	16	REF	6	7	11	5	A	1
3169	17	HMU	1	4	1	5	P	0
3170	17	HMU	1	4	2	5	P	0
3171	17	HMU	1	4	3	5	P	0
3172	17	HMU	1	4	4	5	P	0
3173	17	HMU	1	4	5	5	P	0
3174	17	HMU	1	4	6	5	P	0
3175	17	HMU	1	4	7	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3176	17	HMU	1	4	8	5	P	0
3177	17	HMU	1	4	9	5	P	0
3178	17	HMU	1	4	10	5	P	0
3179	17	HMU	1	4	11	5	P	0
3180	17	HMU	2	3	1	5	P	0
3181	17	HMU	2	3	2	5	P	0
3182	17	HMU	2	3	3	5	P	0
3183	17	HMU	2	3	4	5	P	0
3184	17	HMU	2	3	5	5	P	0
3185	17	HMU	2	3	6	5	P	0
3186	17	HMU	2	3	7	5	P	0
3187	17	HMU	2	3	8	5	P	0
3188	17	HMU	2	3	9	5	P	0
3189	17	HMU	2	3	10	5	P	0
3190	17	HMU	2	3	11	5	P	0
3191	17	HMU	3	7	1	5	A	1
3192	17	HMU	3	7	2	5	P	0
3193	17	HMU	3	7	3	5	P	0
3194	17	HMU	3	7	4	5	A	1
3195	17	HMU	3	7	5	5	A	1
3196	17	HMU	3	7	6	5	P	0
3197	17	HMU	3	7	7	5	P	0
3198	17	HMU	3	7	8	5	P	0
3199	17	HMU	3	7	9	5	P	0
3200	17	HMU	3	7	10	5	P	0
3201	17	HMU	3	7	11	5	P	0
3202	17	HMU	4	1	1	5	P	0
3203	17	HMU	4	1	2	5	P	0
3204	17	HMU	4	1	3	5	P	0
3205	17	HMU	4	1	4	5	P	0
3206	17	HMU	4	1	5	5	P	0
3207	17	HMU	4	1	6	5	P	0
3208	17	HMU	4	1	7	5	P	0
3209	17	HMU	4	1	8	5	A	1
3210	17	HMU	4	1	9	5	P	0
3211	17	HMU	4	1	10	5	P	0
3212	17	HMU	4	1	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3213	17	HMU	5	6	1	5	P	0
3214	17	HMU	5	6	2	5	P	0
3215	17	HMU	5	6	3	5	A	1
3216	17	HMU	5	6	4	5	P	0
3217	17	HMU	5	6	5	5	P	0
3218	17	HMU	5	6	6	5	P	0
3219	17	HMU	5	6	7	5	P	0
3220	17	HMU	5	6	8	5	P	0
3221	17	HMU	5	6	9	5	P	0
3222	17	HMU	5	6	10	5	A	1
3223	17	HMU	5	6	11	5	P	0
3224	17	HMU	6	2	1	5	P	0
3225	17	HMU	6	2	2	5	P	0
3226	17	HMU	6	2	3	5	P	0
3227	17	HMU	6	2	4	5	P	0
3228	17	HMU	6	2	5	5	P	0
3229	17	HMU	6	2	6	5	P	0
3230	17	HMU	6	2	7	5	P	0
3231	17	HMU	6	2	8	5	P	0
3232	17	HMU	6	2	9	5	P	0
3233	17	HMU	6	2	10	5	P	0
3234	17	HMU	6	2	11	5	P	0
3235	17	MSA	1	4	1	5	A	1
3236	17	MSA	1	4	2	5	P	0
3237	17	MSA	1	4	3	5	A	1
3238	17	MSA	1	4	4	5	A	1
3239	17	MSA	1	4	5	5	P	0
3240	17	MSA	1	4	6	5	P	0
3241	17	MSA	1	4	7	5	P	0
3242	17	MSA	1	4	8	5	P	0
3243	17	MSA	1	4	9	5	P	0
3244	17	MSA	1	4	10	5	P	0
3245	17	MSA	1	4	11	5	P	0
3246	17	MSA	2	3	1	5	P	0
3247	17	MSA	2	3	2	5	P	0
3248	17	MSA	2	3	3	5	A	1
3249	17	MSA	2	3	4	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3250	17	MSA	2	3	5	5	P	0
3251	17	MSA	2	3	6	5	P	0
3252	17	MSA	2	3	7	5	P	0
3253	17	MSA	2	3	8	5	P	0
3254	17	MSA	2	3	9	5	P	0
3255	17	MSA	2	3	10	5	P	0
3256	17	MSA	2	3	11	5	P	0
3257	17	MSA	3	7	1	5	P	0
3258	17	MSA	3	7	2	5	P	0
3259	17	MSA	3	7	3	5	P	0
3260	17	MSA	3	7	4	5	P	0
3261	17	MSA	3	7	5	5	P	0
3262	17	MSA	3	7	6	5	P	0
3263	17	MSA	3	7	7	5	P	0
3264	17	MSA	3	7	8	5	P	0
3265	17	MSA	3	7	9	5	P	0
3266	17	MSA	3	7	10	5	P	0
3267	17	MSA	3	7	11	5	P	0
3268	17	MSA	4	1	1	5	A	1
3269	17	MSA	4	1	2	5	P	0
3270	17	MSA	4	1	3	5	P	0
3271	17	MSA	4	1	4	5	A	1
3272	17	MSA	4	1	5	5	P	0
3273	17	MSA	4	1	6	5	P	0
3274	17	MSA	4	1	7	5	P	0
3275	17	MSA	4	1	8	5	P	0
3276	17	MSA	4	1	9	5	P	0
3277	17	MSA	4	1	10	5	P	0
3278	17	MSA	4	1	11	5	P	0
3279	17	MSA	5	6	1	5	P	0
3280	17	MSA	5	6	2	5	P	0
3281	17	MSA	5	6	3	5	P	0
3282	17	MSA	5	6	4	5	P	0
3283	17	MSA	5	6	5	5	A	1
3284	17	MSA	5	6	6	5	P	0
3285	17	MSA	5	6	7	5	P	0
3286	17	MSA	5	6	8	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3287	17	MSA	5	6	9	5	P	0
3288	17	MSA	5	6	10	5	P	0
3289	17	MSA	5	6	11	5	P	0
3290	17	MSA	6	2	1	5	P	0
3291	17	MSA	6	2	2	5	P	0
3292	17	MSA	6	2	3	5	P	0
3293	17	MSA	6	2	4	5	P	0
3294	17	MSA	6	2	5	5	P	0
3295	17	MSA	6	2	6	5	P	0
3296	17	MSA	6	2	7	5	P	0
3297	17	MSA	6	2	8	5	P	0
3298	17	MSA	6	2	9	5	P	0
3299	17	MSA	6	2	10	5	P	0
3300	17	MSA	6	2	11	5	P	0
3301	17	REF	1	4	1	5	A	1
3302	17	REF	1	4	2	5	A	1
3303	17	REF	1	4	3	5	P	0
3304	17	REF	1	4	4	5	A	1
3305	17	REF	1	4	5	5	A	1
3306	17	REF	1	4	6	5	A	1
3307	17	REF	1	4	7	5	A	1
3308	17	REF	1	4	8	5	A	1
3309	17	REF	1	4	9	5	P	0
3310	17	REF	1	4	10	5	A	1
3311	17	REF	1	4	11	5	P	0
3312	17	REF	2	3	1	5	A	1
3313	17	REF	2	3	2	5	A	1
3314	17	REF	2	3	3	5	A	1
3315	17	REF	2	3	4	5	P	0
3316	17	REF	2	3	5	5	A	1
3317	17	REF	2	3	6	5	A	1
3318	17	REF	2	3	7	5	A	1
3319	17	REF	2	3	8	5	A	1
3320	17	REF	2	3	9	5	A	1
3321	17	REF	2	3	10	5	A	1
3322	17	REF	2	3	11	5	A	1
3323	17	REF	3	7	1	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3324	17	REF	3	7	2	5	P	0
3325	17	REF	3	7	3	5	P	0
3326	17	REF	3	7	4	5	A	1
3327	17	REF	3	7	5	5	A	1
3328	17	REF	3	7	6	5	P	0
3329	17	REF	3	7	7	5	P	0
3330	17	REF	3	7	8	5	A	1
3331	17	REF	3	7	9	5	P	0
3332	17	REF	3	7	10	5	A	1
3333	17	REF	3	7	11	5	A	1
3334	17	REF	4	1	1	5	A	1
3335	17	REF	4	1	2	5	P	0
3336	17	REF	4	1	3	5	P	0
3337	17	REF	4	1	4	5	A	1
3338	17	REF	4	1	5	5	A	1
3339	17	REF	4	1	6	5	P	0
3340	17	REF	4	1	7	5	P	0
3341	17	REF	4	1	8	5	A	1
3342	17	REF	4	1	9	5	A	1
3343	17	REF	4	1	10	5	A	1
3344	17	REF	4	1	11	5	A	1
3345	17	REF	5	6	1	5	A	1
3346	17	REF	5	6	2	5	P	0
3347	17	REF	5	6	3	5	P	0
3348	17	REF	5	6	4	5	A	1
3349	17	REF	5	6	5	5	A	1
3350	17	REF	5	6	6	5	A	1
3351	17	REF	5	6	7	5	A	1
3352	17	REF	5	6	8	5	P	0
3353	17	REF	5	6	9	5	A	1
3354	17	REF	5	6	10	5	P	0
3355	17	REF	5	6	11	5	P	0
3356	17	REF	6	2	1	5	P	0
3357	17	REF	6	2	2	5	A	1
3358	17	REF	6	2	3	5	P	0
3359	17	REF	6	2	4	5	A	1
3360	17	REF	6	2	5	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3361	17	REF	6	2	6	5	P	0
3362	17	REF	6	2	7	5	P	0
3363	17	REF	6	2	8	5	P	0
3364	17	REF	6	2	9	5	P	0
3365	17	REF	6	2	10	5	A	1
3366	17	REF	6	2	11	5	P	0
3367	18	HMU	1	9	1	5	P	0
3368	18	HMU	1	9	2	5	P	0
3369	18	HMU	1	9	3	5	A	1
3370	18	HMU	1	9	4	5	P	0
3371	18	HMU	1	9	5	5	P	0
3372	18	HMU	1	9	6	5	P	0
3373	18	HMU	1	9	7	5	P	0
3374	18	HMU	1	9	8	5	P	0
3375	18	HMU	1	9	9	5	P	0
3376	18	HMU	1	9	10	5	P	0
3377	18	HMU	1	9	11	5	P	0
3378	18	HMU	2	8	1	5	P	0
3379	18	HMU	2	8	2	5	P	0
3380	18	HMU	2	8	3	5	A	1
3381	18	HMU	2	8	4	5	P	0
3382	18	HMU	2	8	5	5	P	0
3383	18	HMU	2	8	6	5	P	0
3384	18	HMU	2	8	7	5	P	0
3385	18	HMU	2	8	8	5	P	0
3386	18	HMU	2	8	9	5	P	0
3387	18	HMU	2	8	10	5	P	0
3388	18	HMU	2	8	11	5	P	0
3389	18	HMU	3	1	1	5	P	0
3390	18	HMU	3	1	2	5	A	1
3391	18	HMU	3	1	3	5	P	0
3392	18	HMU	3	1	4	5	P	0
3393	18	HMU	3	1	5	5	P	0
3394	18	HMU	3	1	6	5	P	0
3395	18	HMU	3	1	7	5	P	0
3396	18	HMU	3	1	8	5	P	0
3397	18	HMU	3	1	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3398	18	HMU	3	1	10	5	A	1
3399	18	HMU	3	1	11	5	P	0
3400	18	HMU	4	2	1	5	P	0
3401	18	HMU	4	2	2	5	P	0
3402	18	HMU	4	2	3	5	P	0
3403	18	HMU	4	2	4	5	P	0
3404	18	HMU	4	2	5	5	P	0
3405	18	HMU	4	2	6	5	P	0
3406	18	HMU	4	2	7	5	P	0
3407	18	HMU	4	2	8	5	P	0
3408	18	HMU	4	2	9	5	P	0
3409	18	HMU	4	2	10	5	P	0
3410	18	HMU	4	2	11	5	P	0
3411	18	HMU	5	5	1	5	P	0
3412	18	HMU	5	5	2	5	P	0
3413	18	HMU	5	5	3	5	A	1
3414	18	HMU	5	5	4	5	P	0
3415	18	HMU	5	5	5	5	P	0
3416	18	HMU	5	5	6	5	A	1
3417	18	HMU	5	5	7	5	P	0
3418	18	HMU	5	5	8	5	A	1
3419	18	HMU	5	5	9	5	P	0
3420	18	HMU	5	5	10	5	P	0
3421	18	HMU	5	5	11	5	P	0
3422	18	HMU	6	4	1	5	P	0
3423	18	HMU	6	4	2	5	P	0
3424	18	HMU	6	4	3	5	P	0
3425	18	HMU	6	4	4	5	P	0
3426	18	HMU	6	4	5	5	P	0
3427	18	HMU	6	4	6	5	P	0
3428	18	HMU	6	4	7	5	P	0
3429	18	HMU	6	4	8	5	A	1
3430	18	HMU	6	4	9	5	P	0
3431	18	HMU	6	4	10	5	P	0
3432	18	HMU	6	4	11	5	P	0
3433	18	MSA	1	9	1	5	P	0
3434	18	MSA	1	9	2	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3435	18	MSA	1	9	3	5	P	0
3436	18	MSA	1	9	4	5	P	0
3437	18	MSA	1	9	5	5	P	0
3438	18	MSA	1	9	6	5	P	0
3439	18	MSA	1	9	7	5	P	0
3440	18	MSA	1	9	8	5	P	0
3441	18	MSA	1	9	9	5	A	1
3442	18	MSA	1	9	10	5	A	1
3443	18	MSA	1	9	11	5	A	1
3444	18	MSA	2	8	1	5	P	0
3445	18	MSA	2	8	2	5	P	0
3446	18	MSA	2	8	3	5	P	0
3447	18	MSA	2	8	4	5	A	1
3448	18	MSA	2	8	5	5	P	0
3449	18	MSA	2	8	6	5	P	0
3450	18	MSA	2	8	7	5	P	0
3451	18	MSA	2	8	8	5	P	0
3452	18	MSA	2	8	9	5	P	0
3453	18	MSA	2	8	10	5	P	0
3454	18	MSA	2	8	11	5	P	0
3455	18	MSA	3	1	1	5	P	0
3456	18	MSA	3	1	2	5	A	1
3457	18	MSA	3	1	3	5	A	1
3458	18	MSA	3	1	4	5	P	0
3459	18	MSA	3	1	5	5	P	0
3460	18	MSA	3	1	6	5	P	0
3461	18	MSA	3	1	7	5	P	0
3462	18	MSA	3	1	8	5	P	0
3463	18	MSA	3	1	9	5	P	0
3464	18	MSA	3	1	10	5	P	0
3465	18	MSA	3	1	11	5	P	0
3466	18	MSA	4	2	1	5	A	1
3467	18	MSA	4	2	2	5	A	1
3468	18	MSA	4	2	3	5	P	0
3469	18	MSA	4	2	4	5	P	0
3470	18	MSA	4	2	5	5	P	0
3471	18	MSA	4	2	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3472	18	MSA	4	2	7	5	P	0
3473	18	MSA	4	2	8	5	A	1
3474	18	MSA	4	2	9	5	P	0
3475	18	MSA	4	2	10	5	P	0
3476	18	MSA	4	2	11	5	P	0
3477	18	MSA	5	5	1	5	P	0
3478	18	MSA	5	5	2	5	P	0
3479	18	MSA	5	5	3	5	P	0
3480	18	MSA	5	5	4	5	P	0
3481	18	MSA	5	5	5	5	P	0
3482	18	MSA	5	5	6	5	P	0
3483	18	MSA	5	5	7	5	P	0
3484	18	MSA	5	5	8	5	P	0
3485	18	MSA	5	5	9	5	P	0
3486	18	MSA	5	5	10	5	P	0
3487	18	MSA	5	5	11	5	P	0
3488	18	MSA	6	4	1	5	P	0
3489	18	MSA	6	4	2	5	P	0
3490	18	MSA	6	4	3	5	P	0
3491	18	MSA	6	4	4	5	P	0
3492	18	MSA	6	4	5	5	P	0
3493	18	MSA	6	4	6	5	P	0
3494	18	MSA	6	4	7	5	P	0
3495	18	MSA	6	4	8	5	P	0
3496	18	MSA	6	4	9	5	P	0
3497	18	MSA	6	4	10	5	A	1
3498	18	MSA	6	4	11	5	P	0
3499	18	REF	1	9	1	5	A	1
3500	18	REF	1	9	2	5	A	1
3501	18	REF	1	9	3	5	P	0
3502	18	REF	1	9	4	5	P	0
3503	18	REF	1	9	5	5	A	1
3504	18	REF	1	9	6	5	A	1
3505	18	REF	1	9	7	5	A	1
3506	18	REF	1	9	8	5	A	1
3507	18	REF	1	9	9	5	A	1
3508	18	REF	1	9	10	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3509	18	REF	1	9	11	5	P	0
3510	18	REF	2	8	1	5	A	1
3511	18	REF	2	8	2	5	A	1
3512	18	REF	2	8	3	5	P	0
3513	18	REF	2	8	4	5	A	1
3514	18	REF	2	8	5	5	A	1
3515	18	REF	2	8	6	5	A	1
3516	18	REF	2	8	7	5	A	1
3517	18	REF	2	8	8	5	A	1
3518	18	REF	2	8	9	5	P	0
3519	18	REF	2	8	10	5	A	1
3520	18	REF	2	8	11	5	A	1
3521	18	REF	3	1	1	5	P	0
3522	18	REF	3	1	2	5	P	0
3523	18	REF	3	1	3	5	P	0
3524	18	REF	3	1	4	5	P	0
3525	18	REF	3	1	5	5	P	0
3526	18	REF	3	1	6	5	P	0
3527	18	REF	3	1	7	5	P	0
3528	18	REF	3	1	8	5	A	1
3529	18	REF	3	1	9	5	A	1
3530	18	REF	3	1	10	5	A	1
3531	18	REF	3	1	11	5	P	0
3532	18	REF	4	2	1	5	A	1
3533	18	REF	4	2	2	5	A	1
3534	18	REF	4	2	3	5	A	1
3535	18	REF	4	2	4	5	P	0
3536	18	REF	4	2	5	5	P	0
3537	18	REF	4	2	6	5	A	1
3538	18	REF	4	2	7	5	P	0
3539	18	REF	4	2	8	5	P	0
3540	18	REF	4	2	9	5	P	0
3541	18	REF	4	2	10	5	P	0
3542	18	REF	4	2	11	5	A	1
3543	18	REF	5	5	1	5	A	1
3544	18	REF	5	5	2	5	P	0
3545	18	REF	5	5	3	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3546	18	REF	5	5	4	5	P	0
3547	18	REF	5	5	5	5	P	0
3548	18	REF	5	5	6	5	A	1
3549	18	REF	5	5	7	5	P	0
3550	18	REF	5	5	8	5	P	0
3551	18	REF	5	5	9	5	A	1
3552	18	REF	5	5	10	5	P	0
3553	18	REF	5	5	11	5	P	0
3554	18	REF	6	4	1	5	A	1
3555	18	REF	6	4	2	5	A	1
3556	18	REF	6	4	3	5	A	1
3557	18	REF	6	4	4	5	A	1
3558	18	REF	6	4	5	5	A	1
3559	18	REF	6	4	6	5	P	0
3560	18	REF	6	4	7	5	A	1
3561	18	REF	6	4	8	5	A	1
3562	18	REF	6	4	9	5	A	1
3563	18	REF	6	4	10	5	P	0
3564	18	REF	6	4	11	5	A	1
3565	19	HMU	1	9	1	5	P	0
3566	19	HMU	1	9	2	5	P	0
3567	19	HMU	1	9	3	5	P	0
3568	19	HMU	1	9	4	5	P	0
3569	19	HMU	1	9	5	5	P	0
3570	19	HMU	1	9	6	5	P	0
3571	19	HMU	1	9	7	5	P	0
3572	19	HMU	1	9	8	5	P	0
3573	19	HMU	1	9	9	5	P	0
3574	19	HMU	1	9	10	5	P	0
3575	19	HMU	1	9	11	5	P	0
3576	19	HMU	2	1	1	5	P	0
3577	19	HMU	2	1	2	5	A	1
3578	19	HMU	2	1	3	5	P	0
3579	19	HMU	2	1	4	5	P	0
3580	19	HMU	2	1	5	5	P	0
3581	19	HMU	2	1	6	5	P	0
3582	19	HMU	2	1	7	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3583	19	HMU	2	1	8	5	P	0
3584	19	HMU	2	1	9	5	P	0
3585	19	HMU	2	1	10	5	P	0
3586	19	HMU	2	1	11	5	P	0
3587	19	HMU	3	6	1	5	A	1
3588	19	HMU	3	6	2	5	P	0
3589	19	HMU	3	6	3	5	A	1
3590	19	HMU	3	6	4	5	P	0
3591	19	HMU	3	6	5	5	P	0
3592	19	HMU	3	6	6	5	P	0
3593	19	HMU	3	6	7	5	A	1
3594	19	HMU	3	6	8	5	A	1
3595	19	HMU	3	6	9	5	P	0
3596	19	HMU	3	6	10	5	P	0
3597	19	HMU	3	6	11	5	P	0
3598	19	HMU	4	3	1	5	P	0
3599	19	HMU	4	3	2	5	P	0
3600	19	HMU	4	3	3	5	P	0
3601	19	HMU	4	3	4	5	P	0
3602	19	HMU	4	3	5	5	P	0
3603	19	HMU	4	3	6	5	P	0
3604	19	HMU	4	3	7	5	P	0
3605	19	HMU	4	3	8	5	P	0
3606	19	HMU	4	3	9	5	P	0
3607	19	HMU	4	3	10	5	P	0
3608	19	HMU	4	3	11	5	P	0
3609	19	HMU	5	5	1	5	P	0
3610	19	HMU	5	5	2	5	A	1
3611	19	HMU	5	5	3	5	P	0
3612	19	HMU	5	5	4	5	P	0
3613	19	HMU	5	5	5	5	A	1
3614	19	HMU	5	5	6	5	A	1
3615	19	HMU	5	5	7	5	P	0
3616	19	HMU	5	5	8	5	P	0
3617	19	HMU	5	5	9	5	A	1
3618	19	HMU	5	5	10	5	P	0
3619	19	HMU	5	5	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3620	19	HMU	6	2	1	5	P	0
3621	19	HMU	6	2	2	5	P	0
3622	19	HMU	6	2	3	5	P	0
3623	19	HMU	6	2	4	5	P	0
3624	19	HMU	6	2	5	5	P	0
3625	19	HMU	6	2	6	5	P	0
3626	19	HMU	6	2	7	5	P	0
3627	19	HMU	6	2	8	5	P	0
3628	19	HMU	6	2	9	5	P	0
3629	19	HMU	6	2	10	5	P	0
3630	19	HMU	6	2	11	5	P	0
3631	19	MSA	1	9	1	5	A	1
3632	19	MSA	1	9	2	5	P	0
3633	19	MSA	1	9	3	5	P	0
3634	19	MSA	1	9	4	5	P	0
3635	19	MSA	1	9	5	5	P	0
3636	19	MSA	1	9	6	5	P	0
3637	19	MSA	1	9	7	5	P	0
3638	19	MSA	1	9	8	5	P	0
3639	19	MSA	1	9	9	5	P	0
3640	19	MSA	1	9	10	5	P	0
3641	19	MSA	1	9	11	5	P	0
3642	19	MSA	2	1	1	5	P	0
3643	19	MSA	2	1	2	5	A	1
3644	19	MSA	2	1	3	5	P	0
3645	19	MSA	2	1	4	5	A	1
3646	19	MSA	2	1	5	5	P	0
3647	19	MSA	2	1	6	5	P	0
3648	19	MSA	2	1	7	5	P	0
3649	19	MSA	2	1	8	5	P	0
3650	19	MSA	2	1	9	5	P	0
3651	19	MSA	2	1	10	5	P	0
3652	19	MSA	2	1	11	5	P	0
3653	19	MSA	3	6	1	5	P	0
3654	19	MSA	3	6	2	5	P	0
3655	19	MSA	3	6	3	5	P	0
3656	19	MSA	3	6	4	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3657	19	MSA	3	6	5	5	A	1
3658	19	MSA	3	6	6	5	P	0
3659	19	MSA	3	6	7	5	P	0
3660	19	MSA	3	6	8	5	P	0
3661	19	MSA	3	6	9	5	P	0
3662	19	MSA	3	6	10	5	P	0
3663	19	MSA	3	6	11	5	A	1
3664	19	MSA	4	3	1	5	A	1
3665	19	MSA	4	3	2	5	P	0
3666	19	MSA	4	3	3	5	P	0
3667	19	MSA	4	3	4	5	A	1
3668	19	MSA	4	3	5	5	P	0
3669	19	MSA	4	3	6	5	P	0
3670	19	MSA	4	3	7	5	P	0
3671	19	MSA	4	3	8	5	P	0
3672	19	MSA	4	3	9	5	P	0
3673	19	MSA	4	3	10	5	P	0
3674	19	MSA	4	3	11	5	A	1
3675	19	MSA	5	5	1	5	A	1
3676	19	MSA	5	5	2	5	P	0
3677	19	MSA	5	5	3	5	P	0
3678	19	MSA	5	5	4	5	P	0
3679	19	MSA	5	5	5	5	A	1
3680	19	MSA	5	5	6	5	P	0
3681	19	MSA	5	5	7	5	P	0
3682	19	MSA	5	5	8	5	P	0
3683	19	MSA	5	5	9	5	P	0
3684	19	MSA	5	5	10	5	P	0
3685	19	MSA	5	5	11	5	P	0
3686	19	MSA	6	2	1	5	P	0
3687	19	MSA	6	2	2	5	A	1
3688	19	MSA	6	2	3	5	P	0
3689	19	MSA	6	2	4	5	P	0
3690	19	MSA	6	2	5	5	P	0
3691	19	MSA	6	2	6	5	P	0
3692	19	MSA	6	2	7	5	P	0
3693	19	MSA	6	2	8	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3694	19	MSA	6	2	9	5	P	0
3695	19	MSA	6	2	10	5	P	0
3696	19	MSA	6	2	11	5	P	0
3697	19	REF	1	9	1	5	P	0
3698	19	REF	1	9	2	5	P	0
3699	19	REF	1	9	3	5	P	0
3700	19	REF	1	9	4	5	A	1
3701	19	REF	1	9	5	5	P	0
3702	19	REF	1	9	6	5	P	0
3703	19	REF	1	9	7	5	P	0
3704	19	REF	1	9	8	5	A	1
3705	19	REF	1	9	9	5	P	0
3706	19	REF	1	9	10	5	A	1
3707	19	REF	1	9	11	5	A	1
3708	19	REF	2	1	1	5	P	0
3709	19	REF	2	1	2	5	A	1
3710	19	REF	2	1	3	5	P	0
3711	19	REF	2	1	4	5	A	1
3712	19	REF	2	1	5	5	P	0
3713	19	REF	2	1	6	5	P	0
3714	19	REF	2	1	7	5	P	0
3715	19	REF	2	1	8	5	A	1
3716	19	REF	2	1	9	5	P	0
3717	19	REF	2	1	10	5	P	0
3718	19	REF	2	1	11	5	P	0
3719	19	REF	3	6	1	5	P	0
3720	19	REF	3	6	2	5	P	0
3721	19	REF	3	6	3	5	P	0
3722	19	REF	3	6	4	5	P	0
3723	19	REF	3	6	5	5	A	1
3724	19	REF	3	6	6	5	P	0
3725	19	REF	3	6	7	5	P	0
3726	19	REF	3	6	8	5	P	0
3727	19	REF	3	6	9	5	A	1
3728	19	REF	3	6	10	5	P	0
3729	19	REF	3	6	11	5	P	0
3730	19	REF	4	3	1	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3731	19	REF	4	3	2	5	A	1
3732	19	REF	4	3	3	5	A	1
3733	19	REF	4	3	4	5	A	1
3734	19	REF	4	3	5	5	A	1
3735	19	REF	4	3	6	5	P	0
3736	19	REF	4	3	7	5	A	1
3737	19	REF	4	3	8	5	A	1
3738	19	REF	4	3	9	5	A	1
3739	19	REF	4	3	10	5	P	0
3740	19	REF	4	3	11	5	P	0
3741	19	REF	5	5	1	5	A	1
3742	19	REF	5	5	2	5	A	1
3743	19	REF	5	5	3	5	A	1
3744	19	REF	5	5	4	5	P	0
3745	19	REF	5	5	5	5	A	1
3746	19	REF	5	5	6	5	P	0
3747	19	REF	5	5	7	5	P	0
3748	19	REF	5	5	8	5	P	0
3749	19	REF	5	5	9	5	P	0
3750	19	REF	5	5	10	5	A	1
3751	19	REF	5	5	11	5	A	1
3752	19	REF	6	2	1	5	A	1
3753	19	REF	6	2	2	5	P	0
3754	19	REF	6	2	3	5	P	0
3755	19	REF	6	2	4	5	P	0
3756	19	REF	6	2	5	5	A	1
3757	19	REF	6	2	6	5	A	1
3758	19	REF	6	2	7	5	A	1
3759	19	REF	6	2	8	5	A	1
3760	19	REF	6	2	9	5	P	0
3761	19	REF	6	2	10	5	A	1
3762	19	REF	6	2	11	5	P	0
3763	20	HMU	1	8	1	5	P	0
3764	20	HMU	1	8	2	5	P	0
3765	20	HMU	1	8	3	5	P	0
3766	20	HMU	1	8	4	5	P	0
3767	20	HMU	1	8	5	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3768	20	HMU	1	8	6	5	P	0
3769	20	HMU	1	8	7	5	P	0
3770	20	HMU	1	8	8	5	P	0
3771	20	HMU	1	8	9	5	P	0
3772	20	HMU	1	8	10	5	P	0
3773	20	HMU	1	8	11	5	P	0
3774	20	HMU	2	5	1	5	A	1
3775	20	HMU	2	5	2	5	P	0
3776	20	HMU	2	5	3	5	A	1
3777	20	HMU	2	5	4	5	P	0
3778	20	HMU	2	5	5	5	P	0
3779	20	HMU	2	5	6	5	P	0
3780	20	HMU	2	5	7	5	P	0
3781	20	HMU	2	5	8	5	P	0
3782	20	HMU	2	5	9	5	P	0
3783	20	HMU	2	5	10	5	P	0
3784	20	HMU	2	5	11	5	P	0
3785	20	HMU	3	1	1	5	P	0
3786	20	HMU	3	1	2	5	P	0
3787	20	HMU	3	1	3	5	P	0
3788	20	HMU	3	1	4	5	P	0
3789	20	HMU	3	1	5	5	A	1
3790	20	HMU	3	1	6	5	P	0
3791	20	HMU	3	1	7	5	P	0
3792	20	HMU	3	1	8	5	P	0
3793	20	HMU	3	1	9	5	P	0
3794	20	HMU	3	1	10	5	P	0
3795	20	HMU	3	1	11	5	A	1
3796	20	HMU	4	7	1	5	P	0
3797	20	HMU	4	7	2	5	P	0
3798	20	HMU	4	7	3	5	P	0
3799	20	HMU	4	7	4	5	P	0
3800	20	HMU	4	7	5	5	P	0
3801	20	HMU	4	7	6	5	P	0
3802	20	HMU	4	7	7	5	P	0
3803	20	HMU	4	7	8	5	P	0
3804	20	HMU	4	7	9	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3805	20	HMU	4	7	10	5	A	1
3806	20	HMU	4	7	11	5	P	0
3807	20	HMU	5	3	1	5	A	1
3808	20	HMU	5	3	2	5	P	0
3809	20	HMU	5	3	3	5	P	0
3810	20	HMU	5	3	4	5	P	0
3811	20	HMU	5	3	5	5	P	0
3812	20	HMU	5	3	6	5	P	0
3813	20	HMU	5	3	7	5	A	1
3814	20	HMU	5	3	8	5	P	0
3815	20	HMU	5	3	9	5	A	1
3816	20	HMU	5	3	10	5	P	0
3817	20	HMU	5	3	11	5	A	1
3818	20	HMU	6	2	1	5	P	0
3819	20	HMU	6	2	2	5	P	0
3820	20	HMU	6	2	3	5	P	0
3821	20	HMU	6	2	4	5	P	0
3822	20	HMU	6	2	5	5	P	0
3823	20	HMU	6	2	6	5	P	0
3824	20	HMU	6	2	7	5	P	0
3825	20	HMU	6	2	8	5	P	0
3826	20	HMU	6	2	9	5	P	0
3827	20	HMU	6	2	10	5	P	0
3828	20	HMU	6	2	11	5	P	0
3829	20	MSA	1	8	1	5	P	0
3830	20	MSA	1	8	2	5	P	0
3831	20	MSA	1	8	3	5	P	0
3832	20	MSA	1	8	4	5	P	0
3833	20	MSA	1	8	5	5	P	0
3834	20	MSA	1	8	6	5	P	0
3835	20	MSA	1	8	7	5	P	0
3836	20	MSA	1	8	8	5	P	0
3837	20	MSA	1	8	9	5	P	0
3838	20	MSA	1	8	10	5	P	0
3839	20	MSA	1	8	11	5	P	0
3840	20	MSA	2	5	1	5	P	0
3841	20	MSA	2	5	2	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3842	20	MSA	2	5	3	5	P	0
3843	20	MSA	2	5	4	5	P	0
3844	20	MSA	2	5	5	5	P	0
3845	20	MSA	2	5	6	5	P	0
3846	20	MSA	2	5	7	5	P	0
3847	20	MSA	2	5	8	5	P	0
3848	20	MSA	2	5	9	5	P	0
3849	20	MSA	2	5	10	5	P	0
3850	20	MSA	2	5	11	5	P	0
3851	20	MSA	3	1	1	5	A	1
3852	20	MSA	3	1	2	5	A	1
3853	20	MSA	3	1	3	5	P	0
3854	20	MSA	3	1	4	5	P	0
3855	20	MSA	3	1	5	5	P	0
3856	20	MSA	3	1	6	5	P	0
3857	20	MSA	3	1	7	5	P	0
3858	20	MSA	3	1	8	5	P	0
3859	20	MSA	3	1	9	5	P	0
3860	20	MSA	3	1	10	5	P	0
3861	20	MSA	3	1	11	5	P	0
3862	20	MSA	4	7	1	5	P	0
3863	20	MSA	4	7	2	5	P	0
3864	20	MSA	4	7	3	5	P	0
3865	20	MSA	4	7	4	5	P	0
3866	20	MSA	4	7	5	5	P	0
3867	20	MSA	4	7	6	5	P	0
3868	20	MSA	4	7	7	5	A	1
3869	20	MSA	4	7	8	5	P	0
3870	20	MSA	4	7	9	5	P	0
3871	20	MSA	4	7	10	5	P	0
3872	20	MSA	4	7	11	5	P	0
3873	20	MSA	5	3	1	5	P	0
3874	20	MSA	5	3	2	5	P	0
3875	20	MSA	5	3	3	5	P	0
3876	20	MSA	5	3	4	5	P	0
3877	20	MSA	5	3	5	5	P	0
3878	20	MSA	5	3	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3879	20	MSA	5	3	7	5	P	0
3880	20	MSA	5	3	8	5	P	0
3881	20	MSA	5	3	9	5	P	0
3882	20	MSA	5	3	10	5	P	0
3883	20	MSA	5	3	11	5	P	0
3884	20	MSA	6	2	1	5	P	0
3885	20	MSA	6	2	2	5	A	1
3886	20	MSA	6	2	3	5	P	0
3887	20	MSA	6	2	4	5	P	0
3888	20	MSA	6	2	5	5	P	0
3889	20	MSA	6	2	6	5	P	0
3890	20	MSA	6	2	7	5	P	0
3891	20	MSA	6	2	8	5	A	1
3892	20	MSA	6	2	9	5	P	0
3893	20	MSA	6	2	10	5	P	0
3894	20	MSA	6	2	11	5	P	0
3895	20	REF	1	8	1	5	P	0
3896	20	REF	1	8	2	5	P	0
3897	20	REF	1	8	3	5	A	1
3898	20	REF	1	8	4	5	P	0
3899	20	REF	1	8	5	5	P	0
3900	20	REF	1	8	6	5	P	0
3901	20	REF	1	8	7	5	A	1
3902	20	REF	1	8	8	5	P	0
3903	20	REF	1	8	9	5	A	1
3904	20	REF	1	8	10	5	P	0
3905	20	REF	1	8	11	5	A	1
3906	20	REF	2	5	1	5	A	1
3907	20	REF	2	5	2	5	P	0
3908	20	REF	2	5	3	5	A	1
3909	20	REF	2	5	4	5	P	0
3910	20	REF	2	5	5	5	A	1
3911	20	REF	2	5	6	5	A	1
3912	20	REF	2	5	7	5	P	0
3913	20	REF	2	5	8	5	A	1
3914	20	REF	2	5	9	5	A	1
3915	20	REF	2	5	10	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3916	20	REF	2	5	11	5	P	0
3917	20	REF	3	1	1	5	P	0
3918	20	REF	3	1	2	5	P	0
3919	20	REF	3	1	3	5	A	1
3920	20	REF	3	1	4	5	A	1
3921	20	REF	3	1	5	5	A	1
3922	20	REF	3	1	6	5	A	1
3923	20	REF	3	1	7	5	A	1
3924	20	REF	3	1	8	5	P	0
3925	20	REF	3	1	9	5	P	0
3926	20	REF	3	1	10	5	A	1
3927	20	REF	3	1	11	5	A	1
3928	20	REF	4	7	1	5	A	1
3929	20	REF	4	7	2	5	A	1
3930	20	REF	4	7	3	5	P	0
3931	20	REF	4	7	4	5	A	1
3932	20	REF	4	7	5	5	A	1
3933	20	REF	4	7	6	5	P	0
3934	20	REF	4	7	7	5	P	0
3935	20	REF	4	7	8	5	P	0
3936	20	REF	4	7	9	5	P	0
3937	20	REF	4	7	10	5	P	0
3938	20	REF	4	7	11	5	P	0
3939	20	REF	5	3	1	5	P	0
3940	20	REF	5	3	2	5	P	0
3941	20	REF	5	3	3	5	P	0
3942	20	REF	5	3	4	5	P	0
3943	20	REF	5	3	5	5	A	1
3944	20	REF	5	3	6	5	P	0
3945	20	REF	5	3	7	5	A	1
3946	20	REF	5	3	8	5	P	0
3947	20	REF	5	3	9	5	A	1
3948	20	REF	5	3	10	5	A	1
3949	20	REF	5	3	11	5	A	1
3950	20	REF	6	2	1	5	P	0
3951	20	REF	6	2	2	5	A	1
3952	20	REF	6	2	3	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3953	20	REF	6	2	4	5	A	1
3954	20	REF	6	2	5	5	P	0
3955	20	REF	6	2	6	5	A	1
3956	20	REF	6	2	7	5	P	0
3957	20	REF	6	2	8	5	A	1
3958	20	REF	6	2	9	5	A	1
3959	20	REF	6	2	10	5	A	1
3960	20	REF	6	2	11	5	P	0
3961	21	HMU	1	7	1	5	P	0
3962	21	HMU	1	7	2	5	P	0
3963	21	HMU	1	7	3	5	P	0
3964	21	HMU	1	7	4	5	P	0
3965	21	HMU	1	7	5	5	P	0
3966	21	HMU	1	7	6	5	P	0
3967	21	HMU	1	7	7	5	P	0
3968	21	HMU	1	7	8	5	P	0
3969	21	HMU	1	7	9	5	P	0
3970	21	HMU	1	7	10	5	P	0
3971	21	HMU	1	7	11	5	P	0
3972	21	HMU	2	1	1	5	A	1
3973	21	HMU	2	1	2	5	P	0
3974	21	HMU	2	1	3	5	A	1
3975	21	HMU	2	1	4	5	P	0
3976	21	HMU	2	1	5	5	P	0
3977	21	HMU	2	1	6	5	P	0
3978	21	HMU	2	1	7	5	P	0
3979	21	HMU	2	1	8	5	A	1
3980	21	HMU	2	1	9	5	P	0
3981	21	HMU	2	1	10	5	P	0
3982	21	HMU	2	1	11	5	P	0
3983	21	HMU	3	5	1	5	A	1
3984	21	HMU	3	5	2	5	P	0
3985	21	HMU	3	5	3	5	P	0
3986	21	HMU	3	5	4	5	P	0
3987	21	HMU	3	5	5	5	P	0
3988	21	HMU	3	5	6	5	P	0
3989	21	HMU	3	5	7	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
3990	21	HMU	3	5	8	5	P	0
3991	21	HMU	3	5	9	5	P	0
3992	21	HMU	3	5	10	5	P	0
3993	21	HMU	3	5	11	5	P	0
3994	21	HMU	4	8	1	5	P	0
3995	21	HMU	4	8	2	5	P	0
3996	21	HMU	4	8	3	5	P	0
3997	21	HMU	4	8	4	5	P	0
3998	21	HMU	4	8	5	5	P	0
3999	21	HMU	4	8	6	5	A	1
4000	21	HMU	4	8	7	5	A	1
4001	21	HMU	4	8	8	5	P	0
4002	21	HMU	4	8	9	5	P	0
4003	21	HMU	4	8	10	5	P	0
4004	21	HMU	4	8	11	5	P	0
4005	21	HMU	5	3	1	5	P	0
4006	21	HMU	5	3	2	5	P	0
4007	21	HMU	5	3	3	5	P	0
4008	21	HMU	5	3	4	5	P	0
4009	21	HMU	5	3	5	5	P	0
4010	21	HMU	5	3	6	5	P	0
4011	21	HMU	5	3	7	5	A	1
4012	21	HMU	5	3	8	5	P	0
4013	21	HMU	5	3	9	5	P	0
4014	21	HMU	5	3	10	5	P	0
4015	21	HMU	5	3	11	5	P	0
4016	21	HMU	6	2	1	5	P	0
4017	21	HMU	6	2	2	5	P	0
4018	21	HMU	6	2	3	5	P	0
4019	21	HMU	6	2	4	5	P	0
4020	21	HMU	6	2	5	5	P	0
4021	21	HMU	6	2	6	5	P	0
4022	21	HMU	6	2	7	5	P	0
4023	21	HMU	6	2	8	5	A	1
4024	21	HMU	6	2	9	5	P	0
4025	21	HMU	6	2	10	5	P	0
4026	21	HMU	6	2	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4027	21	MSA	1	7	1	5	P	0
4028	21	MSA	1	7	2	5	P	0
4029	21	MSA	1	7	3	5	P	0
4030	21	MSA	1	7	4	5	P	0
4031	21	MSA	1	7	5	5	P	0
4032	21	MSA	1	7	6	5	P	0
4033	21	MSA	1	7	7	5	P	0
4034	21	MSA	1	7	8	5	P	0
4035	21	MSA	1	7	9	5	P	0
4036	21	MSA	1	7	10	5	P	0
4037	21	MSA	1	7	11	5	A	1
4038	21	MSA	2	1	1	5	P	0
4039	21	MSA	2	1	2	5	P	0
4040	21	MSA	2	1	3	5	A	1
4041	21	MSA	2	1	4	5	A	1
4042	21	MSA	2	1	5	5	A	1
4043	21	MSA	2	1	6	5	P	0
4044	21	MSA	2	1	7	5	A	1
4045	21	MSA	2	1	8	5	P	0
4046	21	MSA	2	1	9	5	A	1
4047	21	MSA	2	1	10	5	P	0
4048	21	MSA	2	1	11	5	P	0
4049	21	MSA	3	5	1	5	P	0
4050	21	MSA	3	5	2	5	P	0
4051	21	MSA	3	5	3	5	P	0
4052	21	MSA	3	5	4	5	P	0
4053	21	MSA	3	5	5	5	P	0
4054	21	MSA	3	5	6	5	P	0
4055	21	MSA	3	5	7	5	P	0
4056	21	MSA	3	5	8	5	P	0
4057	21	MSA	3	5	9	5	P	0
4058	21	MSA	3	5	10	5	P	0
4059	21	MSA	3	5	11	5	P	0
4060	21	MSA	4	8	1	5	P	0
4061	21	MSA	4	8	2	5	P	0
4062	21	MSA	4	8	3	5	P	0
4063	21	MSA	4	8	4	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4064	21	MSA	4	8	5	5	P	0
4065	21	MSA	4	8	6	5	P	0
4066	21	MSA	4	8	7	5	P	0
4067	21	MSA	4	8	8	5	P	0
4068	21	MSA	4	8	9	5	P	0
4069	21	MSA	4	8	10	5	P	0
4070	21	MSA	4	8	11	5	P	0
4071	21	MSA	5	3	1	5	A	1
4072	21	MSA	5	3	2	5	P	0
4073	21	MSA	5	3	3	5	P	0
4074	21	MSA	5	3	4	5	P	0
4075	21	MSA	5	3	5	5	P	0
4076	21	MSA	5	3	6	5	A	1
4077	21	MSA	5	3	7	5	P	0
4078	21	MSA	5	3	8	5	P	0
4079	21	MSA	5	3	9	5	P	0
4080	21	MSA	5	3	10	5	P	0
4081	21	MSA	5	3	11	5	P	0
4082	21	MSA	6	2	1	5	A	1
4083	21	MSA	6	2	2	5	P	0
4084	21	MSA	6	2	3	5	A	1
4085	21	MSA	6	2	4	5	P	0
4086	21	MSA	6	2	5	5	P	0
4087	21	MSA	6	2	6	5	P	0
4088	21	MSA	6	2	7	5	P	0
4089	21	MSA	6	2	8	5	A	1
4090	21	MSA	6	2	9	5	P	0
4091	21	MSA	6	2	10	5	A	1
4092	21	MSA	6	2	11	5	P	0
4093	21	REF	1	7	1	5	A	1
4094	21	REF	1	7	2	5	A	1
4095	21	REF	1	7	3	5	A	1
4096	21	REF	1	7	4	5	A	1
4097	21	REF	1	7	5	5	P	0
4098	21	REF	1	7	6	5	P	0
4099	21	REF	1	7	7	5	P	0
4100	21	REF	1	7	8	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4101	21	REF	1	7	9	5	P	0
4102	21	REF	1	7	10	5	A	1
4103	21	REF	1	7	11	5	A	1
4104	21	REF	2	1	1	5	P	0
4105	21	REF	2	1	2	5	P	0
4106	21	REF	2	1	3	5	A	1
4107	21	REF	2	1	4	5	A	1
4108	21	REF	2	1	5	5	P	0
4109	21	REF	2	1	6	5	P	0
4110	21	REF	2	1	7	5	A	1
4111	21	REF	2	1	8	5	P	0
4112	21	REF	2	1	9	5	A	1
4113	21	REF	2	1	10	5	A	1
4114	21	REF	2	1	11	5	A	1
4115	21	REF	3	5	1	5	A	1
4116	21	REF	3	5	2	5	P	0
4117	21	REF	3	5	3	5	P	0
4118	21	REF	3	5	4	5	P	0
4119	21	REF	3	5	5	5	P	0
4120	21	REF	3	5	6	5	A	1
4121	21	REF	3	5	7	5	P	0
4122	21	REF	3	5	8	5	P	0
4123	21	REF	3	5	9	5	P	0
4124	21	REF	3	5	10	5	P	0
4125	21	REF	3	5	11	5	A	1
4126	21	REF	4	8	1	5	A	1
4127	21	REF	4	8	2	5	P	0
4128	21	REF	4	8	3	5	A	1
4129	21	REF	4	8	4	5	P	0
4130	21	REF	4	8	5	5	P	0
4131	21	REF	4	8	6	5	P	0
4132	21	REF	4	8	7	5	P	0
4133	21	REF	4	8	8	5	P	0
4134	21	REF	4	8	9	5	P	0
4135	21	REF	4	8	10	5	P	0
4136	21	REF	4	8	11	5	P	0
4137	21	REF	5	3	1	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4138	21	REF	5	3	2	5	P	0
4139	21	REF	5	3	3	5	P	0
4140	21	REF	5	3	4	5	P	0
4141	21	REF	5	3	5	5	A	1
4142	21	REF	5	3	6	5	P	0
4143	21	REF	5	3	7	5	P	0
4144	21	REF	5	3	8	5	P	0
4145	21	REF	5	3	9	5	P	0
4146	21	REF	5	3	10	5	P	0
4147	21	REF	5	3	11	5	A	1
4148	21	REF	6	2	1	5	P	0
4149	21	REF	6	2	2	5	A	1
4150	21	REF	6	2	3	5	P	0
4151	21	REF	6	2	4	5	P	0
4152	21	REF	6	2	5	5	P	0
4153	21	REF	6	2	6	5	P	0
4154	21	REF	6	2	7	5	A	1
4155	21	REF	6	2	8	5	P	0
4156	21	REF	6	2	9	5	P	0
4157	21	REF	6	2	10	5	P	0
4158	21	REF	6	2	11	5	P	0
4159	22	HMU	1	7	1	5	P	0
4160	22	HMU	1	7	2	5	P	0
4161	22	HMU	1	7	3	5	P	0
4162	22	HMU	1	7	4	5	P	0
4163	22	HMU	1	7	5	5	P	0
4164	22	HMU	1	7	6	5	P	0
4165	22	HMU	1	7	7	5	P	0
4166	22	HMU	1	7	8	5	P	0
4167	22	HMU	1	7	9	5	P	0
4168	22	HMU	1	7	10	5	P	0
4169	22	HMU	1	7	11	5	P	0
4170	22	HMU	2	4	1	5	P	0
4171	22	HMU	2	4	2	5	P	0
4172	22	HMU	2	4	3	5	P	0
4173	22	HMU	2	4	4	5	P	0
4174	22	HMU	2	4	5	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4175	22	HMU	2	4	6	5	P	0
4176	22	HMU	2	4	7	5	P	0
4177	22	HMU	2	4	8	5	P	0
4178	22	HMU	2	4	9	5	P	0
4179	22	HMU	2	4	10	5	A	1
4180	22	HMU	2	4	11	5	A	1
4181	22	HMU	3	9	1	5	P	0
4182	22	HMU	3	9	2	5	P	0
4183	22	HMU	3	9	3	5	P	0
4184	22	HMU	3	9	4	5	P	0
4185	22	HMU	3	9	5	5	P	0
4186	22	HMU	3	9	6	5	P	0
4187	22	HMU	3	9	7	5	P	0
4188	22	HMU	3	9	8	5	P	0
4189	22	HMU	3	9	9	5	P	0
4190	22	HMU	3	9	10	5	P	0
4191	22	HMU	3	9	11	5	P	0
4192	22	HMU	4	5	1	5	P	0
4193	22	HMU	4	5	2	5	P	0
4194	22	HMU	4	5	3	5	P	0
4195	22	HMU	4	5	4	5	P	0
4196	22	HMU	4	5	5	5	P	0
4197	22	HMU	4	5	6	5	P	0
4198	22	HMU	4	5	7	5	P	0
4199	22	HMU	4	5	8	5	P	0
4200	22	HMU	4	5	9	5	P	0
4201	22	HMU	4	5	10	5	P	0
4202	22	HMU	4	5	11	5	P	0
4203	22	HMU	5	2	1	5	P	0
4204	22	HMU	5	2	2	5	P	0
4205	22	HMU	5	2	3	5	A	1
4206	22	HMU	5	2	4	5	P	0
4207	22	HMU	5	2	5	5	A	1
4208	22	HMU	5	2	6	5	P	0
4209	22	HMU	5	2	7	5	P	0
4210	22	HMU	5	2	8	5	P	0
4211	22	HMU	5	2	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4212	22	HMU	5	2	10	5	P	0
4213	22	HMU	5	2	11	5	A	1
4214	22	HMU	6	8	1	5	P	0
4215	22	HMU	6	8	2	5	P	0
4216	22	HMU	6	8	3	5	P	0
4217	22	HMU	6	8	4	5	P	0
4218	22	HMU	6	8	5	5	P	0
4219	22	HMU	6	8	6	5	P	0
4220	22	HMU	6	8	7	5	P	0
4221	22	HMU	6	8	8	5	P	0
4222	22	HMU	6	8	9	5	P	0
4223	22	HMU	6	8	10	5	P	0
4224	22	HMU	6	8	11	5	P	0
4225	22	MSA	1	7	1	5	A	1
4226	22	MSA	1	7	2	5	A	1
4227	22	MSA	1	7	3	5	A	1
4228	22	MSA	1	7	4	5	P	0
4229	22	MSA	1	7	5	5	P	0
4230	22	MSA	1	7	6	5	A	1
4231	22	MSA	1	7	7	5	P	0
4232	22	MSA	1	7	8	5	A	1
4233	22	MSA	1	7	9	5	P	0
4234	22	MSA	1	7	10	5	P	0
4235	22	MSA	1	7	11	5	P	0
4236	22	MSA	2	4	1	5	P	0
4237	22	MSA	2	4	2	5	P	0
4238	22	MSA	2	4	3	5	P	0
4239	22	MSA	2	4	4	5	P	0
4240	22	MSA	2	4	5	5	P	0
4241	22	MSA	2	4	6	5	A	1
4242	22	MSA	2	4	7	5	P	0
4243	22	MSA	2	4	8	5	P	0
4244	22	MSA	2	4	9	5	P	0
4245	22	MSA	2	4	10	5	P	0
4246	22	MSA	2	4	11	5	P	0
4247	22	MSA	3	9	1	5	P	0
4248	22	MSA	3	9	2	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4249	22	MSA	3	9	3	5	P	0
4250	22	MSA	3	9	4	5	P	0
4251	22	MSA	3	9	5	5	P	0
4252	22	MSA	3	9	6	5	P	0
4253	22	MSA	3	9	7	5	P	0
4254	22	MSA	3	9	8	5	P	0
4255	22	MSA	3	9	9	5	A	1
4256	22	MSA	3	9	10	5	P	0
4257	22	MSA	3	9	11	5	P	0
4258	22	MSA	4	5	1	5	P	0
4259	22	MSA	4	5	2	5	P	0
4260	22	MSA	4	5	3	5	P	0
4261	22	MSA	4	5	4	5	P	0
4262	22	MSA	4	5	5	5	P	0
4263	22	MSA	4	5	6	5	P	0
4264	22	MSA	4	5	7	5	P	0
4265	22	MSA	4	5	8	5	P	0
4266	22	MSA	4	5	9	5	P	0
4267	22	MSA	4	5	10	5	P	0
4268	22	MSA	4	5	11	5	P	0
4269	22	MSA	5	2	1	5	P	0
4270	22	MSA	5	2	2	5	P	0
4271	22	MSA	5	2	3	5	P	0
4272	22	MSA	5	2	4	5	P	0
4273	22	MSA	5	2	5	5	A	1
4274	22	MSA	5	2	6	5	P	0
4275	22	MSA	5	2	7	5	P	0
4276	22	MSA	5	2	8	5	A	1
4277	22	MSA	5	2	9	5	P	0
4278	22	MSA	5	2	10	5	P	0
4279	22	MSA	5	2	11	5	P	0
4280	22	MSA	6	8	1	5	P	0
4281	22	MSA	6	8	2	5	P	0
4282	22	MSA	6	8	3	5	P	0
4283	22	MSA	6	8	4	5	P	0
4284	22	MSA	6	8	5	5	P	0
4285	22	MSA	6	8	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4286	22	MSA	6	8	7	5	P	0
4287	22	MSA	6	8	8	5	P	0
4288	22	MSA	6	8	9	5	P	0
4289	22	MSA	6	8	10	5	A	1
4290	22	MSA	6	8	11	5	P	0
4291	22	REF	1	7	1	5	P	0
4292	22	REF	1	7	2	5	P	0
4293	22	REF	1	7	3	5	P	0
4294	22	REF	1	7	4	5	A	1
4295	22	REF	1	7	5	5	P	0
4296	22	REF	1	7	6	5	A	1
4297	22	REF	1	7	7	5	P	0
4298	22	REF	1	7	8	5	A	1
4299	22	REF	1	7	9	5	P	0
4300	22	REF	1	7	10	5	A	1
4301	22	REF	1	7	11	5	P	0
4302	22	REF	2	4	1	5	A	1
4303	22	REF	2	4	2	5	A	1
4304	22	REF	2	4	3	5	P	0
4305	22	REF	2	4	4	5	P	0
4306	22	REF	2	4	5	5	P	0
4307	22	REF	2	4	6	5	P	0
4308	22	REF	2	4	7	5	P	0
4309	22	REF	2	4	8	5	A	1
4310	22	REF	2	4	9	5	A	1
4311	22	REF	2	4	10	5	P	0
4312	22	REF	2	4	11	5	A	1
4313	22	REF	3	9	1	5	P	0
4314	22	REF	3	9	2	5	P	0
4315	22	REF	3	9	3	5	P	0
4316	22	REF	3	9	4	5	P	0
4317	22	REF	3	9	5	5	P	0
4318	22	REF	3	9	6	5	P	0
4319	22	REF	3	9	7	5	P	0
4320	22	REF	3	9	8	5	P	0
4321	22	REF	3	9	9	5	P	0
4322	22	REF	3	9	10	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4323	22	REF	3	9	11	5	P	0
4324	22	REF	4	5	1	5	A	1
4325	22	REF	4	5	2	5	P	0
4326	22	REF	4	5	3	5	P	0
4327	22	REF	4	5	4	5	P	0
4328	22	REF	4	5	5	5	P	0
4329	22	REF	4	5	6	5	P	0
4330	22	REF	4	5	7	5	P	0
4331	22	REF	4	5	8	5	N	.
4332	22	REF	4	5	9	5	A	1
4333	22	REF	4	5	10	5	P	0
4334	22	REF	4	5	11	5	P	0
4335	22	REF	5	2	1	5	P	0
4336	22	REF	5	2	2	5	P	0
4337	22	REF	5	2	3	5	P	0
4338	22	REF	5	2	4	5	A	1
4339	22	REF	5	2	5	5	P	0
4340	22	REF	5	2	6	5	P	0
4341	22	REF	5	2	7	5	P	0
4342	22	REF	5	2	8	5	P	0
4343	22	REF	5	2	9	5	P	0
4344	22	REF	5	2	10	5	P	0
4345	22	REF	5	2	11	5	A	1
4346	22	REF	6	8	1	5	P	0
4347	22	REF	6	8	2	5	P	0
4348	22	REF	6	8	3	5	P	0
4349	22	REF	6	8	4	5	P	0
4350	22	REF	6	8	5	5	P	0
4351	22	REF	6	8	6	5	P	0
4352	22	REF	6	8	7	5	A	1
4353	22	REF	6	8	8	5	A	1
4354	22	REF	6	8	9	5	P	0
4355	22	REF	6	8	10	5	A	1
4356	22	REF	6	8	11	5	P	0
4357	23	HMU	1	8	1	5	A	1
4358	23	HMU	1	8	2	5	P	0
4359	23	HMU	1	8	3	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4360	23	HMU	1	8	4	5	P	0
4361	23	HMU	1	8	5	5	P	0
4362	23	HMU	1	8	6	5	P	0
4363	23	HMU	1	8	7	5	P	0
4364	23	HMU	1	8	8	5	P	0
4365	23	HMU	1	8	9	5	P	0
4366	23	HMU	1	8	10	5	A	1
4367	23	HMU	1	8	11	5	P	0
4368	23	HMU	2	9	1	5	P	0
4369	23	HMU	2	9	2	5	P	0
4370	23	HMU	2	9	3	5	P	0
4371	23	HMU	2	9	4	5	P	0
4372	23	HMU	2	9	5	5	P	0
4373	23	HMU	2	9	6	5	P	0
4374	23	HMU	2	9	7	5	P	0
4375	23	HMU	2	9	8	5	P	0
4376	23	HMU	2	9	9	5	P	0
4377	23	HMU	2	9	10	5	A	1
4378	23	HMU	2	9	11	5	P	0
4379	23	HMU	3	6	1	5	A	1
4380	23	HMU	3	6	2	5	A	1
4381	23	HMU	3	6	3	5	P	0
4382	23	HMU	3	6	4	5	P	0
4383	23	HMU	3	6	5	5	P	0
4384	23	HMU	3	6	6	5	P	0
4385	23	HMU	3	6	7	5	P	0
4386	23	HMU	3	6	8	5	A	1
4387	23	HMU	3	6	9	5	P	0
4388	23	HMU	3	6	10	5	P	0
4389	23	HMU	3	6	11	5	P	0
4390	23	HMU	4	1	1	5	P	0
4391	23	HMU	4	1	2	5	P	0
4392	23	HMU	4	1	3	5	P	0
4393	23	HMU	4	1	4	5	P	0
4394	23	HMU	4	1	5	5	P	0
4395	23	HMU	4	1	6	5	P	0
4396	23	HMU	4	1	7	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4397	23	HMU	4	1	8	5	P	0
4398	23	HMU	4	1	9	5	P	0
4399	23	HMU	4	1	10	5	P	0
4400	23	HMU	4	1	11	5	P	0
4401	23	HMU	5	5	1	5	P	0
4402	23	HMU	5	5	2	5	P	0
4403	23	HMU	5	5	3	5	P	0
4404	23	HMU	5	5	4	5	P	0
4405	23	HMU	5	5	5	5	P	0
4406	23	HMU	5	5	6	5	P	0
4407	23	HMU	5	5	7	5	P	0
4408	23	HMU	5	5	8	5	A	1
4409	23	HMU	5	5	9	5	P	0
4410	23	HMU	5	5	10	5	P	0
4411	23	HMU	5	5	11	5	P	0
4412	23	HMU	6	6	1	5	P	0
4413	23	HMU	6	6	2	5	P	0
4414	23	HMU	6	6	3	5	P	0
4415	23	HMU	6	6	4	5	P	0
4416	23	HMU	6	6	5	5	P	0
4417	23	HMU	6	6	6	5	P	0
4418	23	HMU	6	6	7	5	P	0
4419	23	HMU	6	6	8	5	P	0
4420	23	HMU	6	6	9	5	P	0
4421	23	HMU	6	6	10	5	P	0
4422	23	HMU	6	6	11	5	P	0
4423	23	MSA	1	8	1	5	A	1
4424	23	MSA	1	8	2	5	P	0
4425	23	MSA	1	8	3	5	P	0
4426	23	MSA	1	8	4	5	A	1
4427	23	MSA	1	8	5	5	P	0
4428	23	MSA	1	8	6	5	P	0
4429	23	MSA	1	8	7	5	P	0
4430	23	MSA	1	8	8	5	A	1
4431	23	MSA	1	8	9	5	A	1
4432	23	MSA	1	8	10	5	P	0
4433	23	MSA	1	8	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4434	23	MSA	2	9	1	5	A	1
4435	23	MSA	2	9	2	5	P	0
4436	23	MSA	2	9	3	5	P	0
4437	23	MSA	2	9	4	5	P	0
4438	23	MSA	2	9	5	5	P	0
4439	23	MSA	2	9	6	5	P	0
4440	23	MSA	2	9	7	5	P	0
4441	23	MSA	2	9	8	5	P	0
4442	23	MSA	2	9	9	5	P	0
4443	23	MSA	2	9	10	5	P	0
4444	23	MSA	2	9	11	5	P	0
4445	23	MSA	3	6	1	5	P	0
4446	23	MSA	3	6	2	5	P	0
4447	23	MSA	3	6	3	5	P	0
4448	23	MSA	3	6	4	5	P	0
4449	23	MSA	3	6	5	5	P	0
4450	23	MSA	3	6	6	5	P	0
4451	23	MSA	3	6	7	5	P	0
4452	23	MSA	3	6	8	5	P	0
4453	23	MSA	3	6	9	5	A	1
4454	23	MSA	3	6	10	5	P	0
4455	23	MSA	3	6	11	5	P	0
4456	23	MSA	4	1	1	5	A	1
4457	23	MSA	4	1	2	5	P	0
4458	23	MSA	4	1	3	5	P	0
4459	23	MSA	4	1	4	5	P	0
4460	23	MSA	4	1	5	5	P	0
4461	23	MSA	4	1	6	5	P	0
4462	23	MSA	4	1	7	5	P	0
4463	23	MSA	4	1	8	5	P	0
4464	23	MSA	4	1	9	5	P	0
4465	23	MSA	4	1	10	5	P	0
4466	23	MSA	4	1	11	5	P	0
4467	23	MSA	5	5	1	5	P	0
4468	23	MSA	5	5	2	5	P	0
4469	23	MSA	5	5	3	5	P	0
4470	23	MSA	5	5	4	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4471	23	MSA	5	5	5	5	P	0
4472	23	MSA	5	5	6	5	P	0
4473	23	MSA	5	5	7	5	P	0
4474	23	MSA	5	5	8	5	P	0
4475	23	MSA	5	5	9	5	P	0
4476	23	MSA	5	5	10	5	P	0
4477	23	MSA	5	5	11	5	P	0
4478	23	MSA	6	6	1	5	A	1
4479	23	MSA	6	6	2	5	P	0
4480	23	MSA	6	6	3	5	A	1
4481	23	MSA	6	6	4	5	P	0
4482	23	MSA	6	6	5	5	P	0
4483	23	MSA	6	6	6	5	P	0
4484	23	MSA	6	6	7	5	P	0
4485	23	MSA	6	6	8	5	P	0
4486	23	MSA	6	6	9	5	P	0
4487	23	MSA	6	6	10	5	P	0
4488	23	MSA	6	6	11	5	P	0
4489	23	REF	1	8	1	5	A	1
4490	23	REF	1	8	2	5	P	0
4491	23	REF	1	8	3	5	P	0
4492	23	REF	1	8	4	5	P	0
4493	23	REF	1	8	5	5	P	0
4494	23	REF	1	8	6	5	A	1
4495	23	REF	1	8	7	5	P	0
4496	23	REF	1	8	8	5	P	0
4497	23	REF	1	8	9	5	A	1
4498	23	REF	1	8	10	5	A	1
4499	23	REF	1	8	11	5	A	1
4500	23	REF	2	9	1	5	P	0
4501	23	REF	2	9	2	5	P	0
4502	23	REF	2	9	3	5	P	0
4503	23	REF	2	9	4	5	A	1
4504	23	REF	2	9	5	5	P	0
4505	23	REF	2	9	6	5	P	0
4506	23	REF	2	9	7	5	P	0
4507	23	REF	2	9	8	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4508	23	REF	2	9	9	5	P	0
4509	23	REF	2	9	10	5	P	0
4510	23	REF	2	9	11	5	P	0
4511	23	REF	3	6	1	5	P	0
4512	23	REF	3	6	2	5	P	0
4513	23	REF	3	6	3	5	P	0
4514	23	REF	3	6	4	5	P	0
4515	23	REF	3	6	5	5	P	0
4516	23	REF	3	6	6	5	P	0
4517	23	REF	3	6	7	5	A	1
4518	23	REF	3	6	8	5	P	0
4519	23	REF	3	6	9	5	P	0
4520	23	REF	3	6	10	5	A	1
4521	23	REF	3	6	11	5	P	0
4522	23	REF	4	1	1	5	A	1
4523	23	REF	4	1	2	5	A	1
4524	23	REF	4	1	3	5	A	1
4525	23	REF	4	1	4	5	A	1
4526	23	REF	4	1	5	5	A	1
4527	23	REF	4	1	6	5	P	0
4528	23	REF	4	1	7	5	P	0
4529	23	REF	4	1	8	5	P	0
4530	23	REF	4	1	9	5	P	0
4531	23	REF	4	1	10	5	A	1
4532	23	REF	4	1	11	5	A	1
4533	23	REF	5	5	1	5	P	0
4534	23	REF	5	5	2	5	A	1
4535	23	REF	5	5	3	5	P	0
4536	23	REF	5	5	4	5	P	0
4537	23	REF	5	5	5	5	A	1
4538	23	REF	5	5	6	5	A	1
4539	23	REF	5	5	7	5	P	0
4540	23	REF	5	5	8	5	A	1
4541	23	REF	5	5	9	5	P	0
4542	23	REF	5	5	10	5	P	0
4543	23	REF	5	5	11	5	A	1
4544	23	REF	6	6	1	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4545	23	REF	6	6	2	5	P	0
4546	23	REF	6	6	3	5	P	0
4547	23	REF	6	6	4	5	P	0
4548	23	REF	6	6	5	5	A	1
4549	23	REF	6	6	6	5	A	1
4550	23	REF	6	6	7	5	P	0
4551	23	REF	6	6	8	5	P	0
4552	23	REF	6	6	9	5	A	1
4553	23	REF	6	6	10	5	A	1
4554	23	REF	6	6	11	5	A	1
4555	24	HMU	1	4	1	5	A	1
4556	24	HMU	1	4	2	5	P	0
4557	24	HMU	1	4	3	5	P	0
4558	24	HMU	1	4	4	5	P	0
4559	24	HMU	1	4	5	5	A	1
4560	24	HMU	1	4	6	5	A	1
4561	24	HMU	1	4	7	5	P	0
4562	24	HMU	1	4	8	5	A	1
4563	24	HMU	1	4	9	5	P	0
4564	24	HMU	1	4	10	5	P	0
4565	24	HMU	1	4	11	5	P	0
4566	24	HMU	2	3	1	5	A	1
4567	24	HMU	2	3	2	5	A	1
4568	24	HMU	2	3	3	5	P	0
4569	24	HMU	2	3	4	5	P	0
4570	24	HMU	2	3	5	5	P	0
4571	24	HMU	2	3	6	5	P	0
4572	24	HMU	2	3	7	5	A	1
4573	24	HMU	2	3	8	5	P	0
4574	24	HMU	2	3	9	5	P	0
4575	24	HMU	2	3	10	5	P	0
4576	24	HMU	2	3	11	5	A	1
4577	24	HMU	3	1	1	5	P	0
4578	24	HMU	3	1	2	5	A	1
4579	24	HMU	3	1	3	5	P	0
4580	24	HMU	3	1	4	5	P	0
4581	24	HMU	3	1	5	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4582	24	HMU	3	1	6	5	A	1
4583	24	HMU	3	1	7	5	P	0
4584	24	HMU	3	1	8	5	A	1
4585	24	HMU	3	1	9	5	P	0
4586	24	HMU	3	1	10	5	P	0
4587	24	HMU	3	1	11	5	A	1
4588	24	HMU	4	3	1	5	P	0
4589	24	HMU	4	3	2	5	P	0
4590	24	HMU	4	3	3	5	P	0
4591	24	HMU	4	3	4	5	P	0
4592	24	HMU	4	3	5	5	A	1
4593	24	HMU	4	3	6	5	P	0
4594	24	HMU	4	3	7	5	P	0
4595	24	HMU	4	3	8	5	P	0
4596	24	HMU	4	3	9	5	P	0
4597	24	HMU	4	3	10	5	P	0
4598	24	HMU	4	3	11	5	A	1
4599	24	HMU	5	7	1	5	P	0
4600	24	HMU	5	7	2	5	P	0
4601	24	HMU	5	7	3	5	A	1
4602	24	HMU	5	7	4	5	A	1
4603	24	HMU	5	7	5	5	A	1
4604	24	HMU	5	7	6	5	P	0
4605	24	HMU	5	7	7	5	P	0
4606	24	HMU	5	7	8	5	P	0
4607	24	HMU	5	7	9	5	P	0
4608	24	HMU	5	7	10	5	P	0
4609	24	HMU	5	7	11	5	P	0
4610	24	HMU	6	8	1	5	A	1
4611	24	HMU	6	8	2	5	P	0
4612	24	HMU	6	8	3	5	A	1
4613	24	HMU	6	8	4	5	P	0
4614	24	HMU	6	8	5	5	P	0
4615	24	HMU	6	8	6	5	A	1
4616	24	HMU	6	8	7	5	P	0
4617	24	HMU	6	8	8	5	P	0
4618	24	HMU	6	8	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4619	24	HMU	6	8	10	5	P	0
4620	24	HMU	6	8	11	5	P	0
4621	24	MSA	1	4	1	5	A	1
4622	24	MSA	1	4	2	5	A	1
4623	24	MSA	1	4	3	5	P	0
4624	24	MSA	1	4	4	5	P	0
4625	24	MSA	1	4	5	5	P	0
4626	24	MSA	1	4	6	5	P	0
4627	24	MSA	1	4	7	5	P	0
4628	24	MSA	1	4	8	5	P	0
4629	24	MSA	1	4	9	5	P	0
4630	24	MSA	1	4	10	5	P	0
4631	24	MSA	1	4	11	5	P	0
4632	24	MSA	2	3	1	5	A	1
4633	24	MSA	2	3	2	5	A	1
4634	24	MSA	2	3	3	5	P	0
4635	24	MSA	2	3	4	5	P	0
4636	24	MSA	2	3	5	5	P	0
4637	24	MSA	2	3	6	5	P	0
4638	24	MSA	2	3	7	5	P	0
4639	24	MSA	2	3	8	5	A	1
4640	24	MSA	2	3	9	5	A	1
4641	24	MSA	2	3	10	5	A	1
4642	24	MSA	2	3	11	5	A	1
4643	24	MSA	3	1	1	5	P	0
4644	24	MSA	3	1	2	5	A	1
4645	24	MSA	3	1	3	5	A	1
4646	24	MSA	3	1	4	5	P	0
4647	24	MSA	3	1	5	5	P	0
4648	24	MSA	3	1	6	5	A	1
4649	24	MSA	3	1	7	5	P	0
4650	24	MSA	3	1	8	5	P	0
4651	24	MSA	3	1	9	5	P	0
4652	24	MSA	3	1	10	5	P	0
4653	24	MSA	3	1	11	5	A	1
4654	24	MSA	4	3	1	5	P	0
4655	24	MSA	4	3	2	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4656	24	MSA	4	3	3	5	P	0
4657	24	MSA	4	3	4	5	P	0
4658	24	MSA	4	3	5	5	A	1
4659	24	MSA	4	3	6	5	P	0
4660	24	MSA	4	3	7	5	P	0
4661	24	MSA	4	3	8	5	P	0
4662	24	MSA	4	3	9	5	A	1
4663	24	MSA	4	3	10	5	A	1
4664	24	MSA	4	3	11	5	A	1
4665	24	MSA	5	7	1	5	P	0
4666	24	MSA	5	7	2	5	P	0
4667	24	MSA	5	7	3	5	P	0
4668	24	MSA	5	7	4	5	P	0
4669	24	MSA	5	7	5	5	P	0
4670	24	MSA	5	7	6	5	P	0
4671	24	MSA	5	7	7	5	P	0
4672	24	MSA	5	7	8	5	A	1
4673	24	MSA	5	7	9	5	P	0
4674	24	MSA	5	7	10	5	P	0
4675	24	MSA	5	7	11	5	P	0
4676	24	MSA	6	8	1	5	P	0
4677	24	MSA	6	8	2	5	P	0
4678	24	MSA	6	8	3	5	P	0
4679	24	MSA	6	8	4	5	P	0
4680	24	MSA	6	8	5	5	P	0
4681	24	MSA	6	8	6	5	P	0
4682	24	MSA	6	8	7	5	P	0
4683	24	MSA	6	8	8	5	P	0
4684	24	MSA	6	8	9	5	P	0
4685	24	MSA	6	8	10	5	P	0
4686	24	MSA	6	8	11	5	P	0
4687	24	REF	1	4	1	5	A	1
4688	24	REF	1	4	2	5	A	1
4689	24	REF	1	4	3	5	A	1
4690	24	REF	1	4	4	5	P	0
4691	24	REF	1	4	5	5	P	0
4692	24	REF	1	4	6	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4693	24	REF	1	4	7	5	P	0
4694	24	REF	1	4	8	5	P	0
4695	24	REF	1	4	9	5	A	1
4696	24	REF	1	4	10	5	A	1
4697	24	REF	1	4	11	5	A	1
4698	24	REF	2	3	1	5	A	1
4699	24	REF	2	3	2	5	A	1
4700	24	REF	2	3	3	5	A	1
4701	24	REF	2	3	4	5	A	1
4702	24	REF	2	3	5	5	A	1
4703	24	REF	2	3	6	5	P	0
4704	24	REF	2	3	7	5	A	1
4705	24	REF	2	3	8	5	P	0
4706	24	REF	2	3	9	5	A	1
4707	24	REF	2	3	10	5	P	0
4708	24	REF	2	3	11	5	A	1
4709	24	REF	3	1	1	5	P	0
4710	24	REF	3	1	2	5	P	0
4711	24	REF	3	1	3	5	P	0
4712	24	REF	3	1	4	5	P	0
4713	24	REF	3	1	5	5	A	1
4714	24	REF	3	1	6	5	A	1
4715	24	REF	3	1	7	5	A	1
4716	24	REF	3	1	8	5	A	1
4717	24	REF	3	1	9	5	P	0
4718	24	REF	3	1	10	5	P	0
4719	24	REF	3	1	11	5	P	0
4720	24	REF	4	3	1	5	A	1
4721	24	REF	4	3	2	5	A	1
4722	24	REF	4	3	3	5	A	1
4723	24	REF	4	3	4	5	A	1
4724	24	REF	4	3	5	5	P	0
4725	24	REF	4	3	6	5	A	1
4726	24	REF	4	3	7	5	A	1
4727	24	REF	4	3	8	5	P	0
4728	24	REF	4	3	9	5	P	0
4729	24	REF	4	3	10	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4730	24	REF	4	3	11	5	P	0
4731	24	REF	5	7	1	5	A	1
4732	24	REF	5	7	2	5	A	1
4733	24	REF	5	7	3	5	A	1
4734	24	REF	5	7	4	5	P	0
4735	24	REF	5	7	5	5	P	0
4736	24	REF	5	7	6	5	P	0
4737	24	REF	5	7	7	5	A	1
4738	24	REF	5	7	8	5	P	0
4739	24	REF	5	7	9	5	P	0
4740	24	REF	5	7	10	5	P	0
4741	24	REF	5	7	11	5	A	1
4742	24	REF	6	8	1	5	P	0
4743	24	REF	6	8	2	5	A	1
4744	24	REF	6	8	3	5	A	1
4745	24	REF	6	8	4	5	A	1
4746	24	REF	6	8	5	5	P	0
4747	24	REF	6	8	6	5	A	1
4748	24	REF	6	8	7	5	P	0
4749	24	REF	6	8	8	5	A	1
4750	24	REF	6	8	9	5	P	0
4751	24	REF	6	8	10	5	A	1
4752	24	REF	6	8	11	5	A	1
4753	25	HMU	1	9	1	5	P	0
4754	25	HMU	1	9	2	5	P	0
4755	25	HMU	1	9	3	5	P	0
4756	25	HMU	1	9	4	5	P	0
4757	25	HMU	1	9	5	5	P	0
4758	25	HMU	1	9	6	5	P	0
4759	25	HMU	1	9	7	5	P	0
4760	25	HMU	1	9	8	5	P	0
4761	25	HMU	1	9	9	5	P	0
4762	25	HMU	1	9	10	5	A	1
4763	25	HMU	1	9	11	5	A	1
4764	25	HMU	2	2	1	5	A	1
4765	25	HMU	2	2	2	5	P	0
4766	25	HMU	2	2	3	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4767	25	HMU	2	2	4	5	P	0
4768	25	HMU	2	2	5	5	P	0
4769	25	HMU	2	2	6	5	P	0
4770	25	HMU	2	2	7	5	A	1
4771	25	HMU	2	2	8	5	A	1
4772	25	HMU	2	2	9	5	A	1
4773	25	HMU	2	2	10	5	P	0
4774	25	HMU	2	2	11	5	P	0
4775	25	HMU	3	2	1	5	P	0
4776	25	HMU	3	2	2	5	P	0
4777	25	HMU	3	2	3	5	A	1
4778	25	HMU	3	2	4	5	P	0
4779	25	HMU	3	2	5	5	P	0
4780	25	HMU	3	2	6	5	P	0
4781	25	HMU	3	2	7	5	P	0
4782	25	HMU	3	2	8	5	P	0
4783	25	HMU	3	2	9	5	P	0
4784	25	HMU	3	2	10	5	P	0
4785	25	HMU	3	2	11	5	P	0
4786	25	HMU	4	2	1	5	A	1
4787	25	HMU	4	2	2	5	P	0
4788	25	HMU	4	2	3	5	P	0
4789	25	HMU	4	2	4	5	P	0
4790	25	HMU	4	2	5	5	A	1
4791	25	HMU	4	2	6	5	A	1
4792	25	HMU	4	2	7	5	A	1
4793	25	HMU	4	2	8	5	P	0
4794	25	HMU	4	2	9	5	A	1
4795	25	HMU	4	2	10	5	P	0
4796	25	HMU	4	2	11	5	P	0
4797	25	HMU	5	3	1	5	P	0
4798	25	HMU	5	3	2	5	P	0
4799	25	HMU	5	3	3	5	P	0
4800	25	HMU	5	3	4	5	P	0
4801	25	HMU	5	3	5	5	P	0
4802	25	HMU	5	3	6	5	A	1
4803	25	HMU	5	3	7	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4804	25	HMU	5	3	8	5	P	0
4805	25	HMU	5	3	9	5	P	0
4806	25	HMU	5	3	10	5	A	1
4807	25	HMU	5	3	11	5	P	0
4808	25	HMU	6	3	1	5	A	1
4809	25	HMU	6	3	2	5	P	0
4810	25	HMU	6	3	3	5	P	0
4811	25	HMU	6	3	4	5	P	0
4812	25	HMU	6	3	5	5	P	0
4813	25	HMU	6	3	6	5	P	0
4814	25	HMU	6	3	7	5	P	0
4815	25	HMU	6	3	8	5	P	0
4816	25	HMU	6	3	9	5	P	0
4817	25	HMU	6	3	10	5	P	0
4818	25	HMU	6	3	11	5	P	0
4819	25	MSA	1	9	1	5	A	1
4820	25	MSA	1	9	2	5	P	0
4821	25	MSA	1	9	3	5	P	0
4822	25	MSA	1	9	4	5	P	0
4823	25	MSA	1	9	5	5	P	0
4824	25	MSA	1	9	6	5	P	0
4825	25	MSA	1	9	7	5	A	1
4826	25	MSA	1	9	8	5	P	0
4827	25	MSA	1	9	9	5	P	0
4828	25	MSA	1	9	10	5	P	0
4829	25	MSA	1	9	11	5	P	0
4830	25	MSA	2	2	1	5	A	1
4831	25	MSA	2	2	2	5	P	0
4832	25	MSA	2	2	3	5	P	0
4833	25	MSA	2	2	4	5	P	0
4834	25	MSA	2	2	5	5	P	0
4835	25	MSA	2	2	6	5	A	1
4836	25	MSA	2	2	7	5	P	0
4837	25	MSA	2	2	8	5	P	0
4838	25	MSA	2	2	9	5	A	1
4839	25	MSA	2	2	10	5	P	0
4840	25	MSA	2	2	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4841	25	MSA	3	2	1	5	P	0
4842	25	MSA	3	2	2	5	A	1
4843	25	MSA	3	2	3	5	P	0
4844	25	MSA	3	2	4	5	P	0
4845	25	MSA	3	2	5	5	A	1
4846	25	MSA	3	2	6	5	A	1
4847	25	MSA	3	2	7	5	A	1
4848	25	MSA	3	2	8	5	P	0
4849	25	MSA	3	2	9	5	P	0
4850	25	MSA	3	2	10	5	A	1
4851	25	MSA	3	2	11	5	P	0
4852	25	MSA	4	2	1	5	P	0
4853	25	MSA	4	2	2	5	P	0
4854	25	MSA	4	2	3	5	P	0
4855	25	MSA	4	2	4	5	P	0
4856	25	MSA	4	2	5	5	P	0
4857	25	MSA	4	2	6	5	P	0
4858	25	MSA	4	2	7	5	A	1
4859	25	MSA	4	2	8	5	A	1
4860	25	MSA	4	2	9	5	P	0
4861	25	MSA	4	2	10	5	P	0
4862	25	MSA	4	2	11	5	A	1
4863	25	MSA	5	3	1	5	A	1
4864	25	MSA	5	3	2	5	P	0
4865	25	MSA	5	3	3	5	P	0
4866	25	MSA	5	3	4	5	P	0
4867	25	MSA	5	3	5	5	P	0
4868	25	MSA	5	3	6	5	P	0
4869	25	MSA	5	3	7	5	P	0
4870	25	MSA	5	3	8	5	P	0
4871	25	MSA	5	3	9	5	A	1
4872	25	MSA	5	3	10	5	P	0
4873	25	MSA	5	3	11	5	P	0
4874	25	MSA	6	3	1	5	P	0
4875	25	MSA	6	3	2	5	A	1
4876	25	MSA	6	3	3	5	P	0
4877	25	MSA	6	3	4	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4878	25	MSA	6	3	5	5	P	0
4879	25	MSA	6	3	6	5	P	0
4880	25	MSA	6	3	7	5	P	0
4881	25	MSA	6	3	8	5	P	0
4882	25	MSA	6	3	9	5	P	0
4883	25	MSA	6	3	10	5	P	0
4884	25	MSA	6	3	11	5	P	0
4885	25	REF	1	9	1	5	P	0
4886	25	REF	1	9	2	5	P	0
4887	25	REF	1	9	3	5	P	0
4888	25	REF	1	9	4	5	P	0
4889	25	REF	1	9	5	5	A	1
4890	25	REF	1	9	6	5	A	1
4891	25	REF	1	9	7	5	A	1
4892	25	REF	1	9	8	5	A	1
4893	25	REF	1	9	9	5	A	1
4894	25	REF	1	9	10	5	A	1
4895	25	REF	1	9	11	5	A	1
4896	25	REF	2	2	1	5	A	1
4897	25	REF	2	2	2	5	A	1
4898	25	REF	2	2	3	5	P	0
4899	25	REF	2	2	4	5	P	0
4900	25	REF	2	2	5	5	A	1
4901	25	REF	2	2	6	5	P	0
4902	25	REF	2	2	7	5	A	1
4903	25	REF	2	2	8	5	A	1
4904	25	REF	2	2	9	5	P	0
4905	25	REF	2	2	10	5	A	1
4906	25	REF	2	2	11	5	P	0
4907	25	REF	3	2	1	5	P	0
4908	25	REF	3	2	2	5	P	0
4909	25	REF	3	2	3	5	P	0
4910	25	REF	3	2	4	5	P	0
4911	25	REF	3	2	5	5	P	0
4912	25	REF	3	2	6	5	A	1
4913	25	REF	3	2	7	5	A	1
4914	25	REF	3	2	8	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4915	25	REF	3	2	9	5	P	0
4916	25	REF	3	2	10	5	A	1
4917	25	REF	3	2	11	5	P	0
4918	25	REF	4	2	1	5	A	1
4919	25	REF	4	2	2	5	A	1
4920	25	REF	4	2	3	5	A	1
4921	25	REF	4	2	4	5	A	1
4922	25	REF	4	2	5	5	A	1
4923	25	REF	4	2	6	5	A	1
4924	25	REF	4	2	7	5	A	1
4925	25	REF	4	2	8	5	A	1
4926	25	REF	4	2	9	5	A	1
4927	25	REF	4	2	10	5	A	1
4928	25	REF	4	2	11	5	P	0
4929	25	REF	5	3	1	5	P	0
4930	25	REF	5	3	2	5	P	0
4931	25	REF	5	3	3	5	A	1
4932	25	REF	5	3	4	5	P	0
4933	25	REF	5	3	5	5	A	1
4934	25	REF	5	3	6	5	A	1
4935	25	REF	5	3	7	5	A	1
4936	25	REF	5	3	8	5	P	0
4937	25	REF	5	3	9	5	A	1
4938	25	REF	5	3	10	5	P	0
4939	25	REF	5	3	11	5	P	0
4940	25	REF	6	3	1	5	A	1
4941	25	REF	6	3	2	5	P	0
4942	25	REF	6	3	3	5	A	1
4943	25	REF	6	3	4	5	A	1
4944	25	REF	6	3	5	5	A	1
4945	25	REF	6	3	6	5	A	1
4946	25	REF	6	3	7	5	A	1
4947	25	REF	6	3	8	5	P	0
4948	25	REF	6	3	9	5	P	0
4949	25	REF	6	3	10	5	P	0
4950	25	REF	6	3	11	5	A	1
4951	26	HMU	1	5	1	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4952	26	HMU	1	5	2	5	P	0
4953	26	HMU	1	5	3	5	P	0
4954	26	HMU	1	5	4	5	A	1
4955	26	HMU	1	5	5	5	A	1
4956	26	HMU	1	5	6	5	P	0
4957	26	HMU	1	5	7	5	P	0
4958	26	HMU	1	5	8	5	A	1
4959	26	HMU	1	5	9	5	A	1
4960	26	HMU	1	5	10	5	P	0
4961	26	HMU	1	5	11	5	P	0
4962	26	HMU	2	4	1	5	P	0
4963	26	HMU	2	4	2	5	P	0
4964	26	HMU	2	4	3	5	P	0
4965	26	HMU	2	4	4	5	P	0
4966	26	HMU	2	4	5	5	A	1
4967	26	HMU	2	4	6	5	P	0
4968	26	HMU	2	4	7	5	P	0
4969	26	HMU	2	4	8	5	P	0
4970	26	HMU	2	4	9	5	P	0
4971	26	HMU	2	4	10	5	P	0
4972	26	HMU	2	4	11	5	P	0
4973	26	HMU	3	8	1	5	A	1
4974	26	HMU	3	8	2	5	A	1
4975	26	HMU	3	8	3	5	P	0
4976	26	HMU	3	8	4	5	A	1
4977	26	HMU	3	8	5	5	P	0
4978	26	HMU	3	8	6	5	P	0
4979	26	HMU	3	8	7	5	P	0
4980	26	HMU	3	8	8	5	P	0
4981	26	HMU	3	8	9	5	P	0
4982	26	HMU	3	8	10	5	P	0
4983	26	HMU	3	8	11	5	P	0
4984	26	HMU	4	6	1	5	P	0
4985	26	HMU	4	6	2	5	P	0
4986	26	HMU	4	6	3	5	P	0
4987	26	HMU	4	6	4	5	P	0
4988	26	HMU	4	6	5	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
4989	26	HMU	4	6	6	5	P	0
4990	26	HMU	4	6	7	5	A	1
4991	26	HMU	4	6	8	5	P	0
4992	26	HMU	4	6	9	5	P	0
4993	26	HMU	4	6	10	5	P	0
4994	26	HMU	4	6	11	5	P	0
4995	26	HMU	5	8	1	5	P	0
4996	26	HMU	5	8	2	5	A	1
4997	26	HMU	5	8	3	5	P	0
4998	26	HMU	5	8	4	5	P	0
4999	26	HMU	5	8	5	5	A	1
5000	26	HMU	5	8	6	5	A	1
5001	26	HMU	5	8	7	5	A	1
5002	26	HMU	5	8	8	5	P	0
5003	26	HMU	5	8	9	5	A	1
5004	26	HMU	5	8	10	5	A	1
5005	26	HMU	5	8	11	5	A	1
5006	26	HMU	6	4	1	5	P	0
5007	26	HMU	6	4	2	5	P	0
5008	26	HMU	6	4	3	5	P	0
5009	26	HMU	6	4	4	5	P	0
5010	26	HMU	6	4	5	5	P	0
5011	26	HMU	6	4	6	5	P	0
5012	26	HMU	6	4	7	5	A	1
5013	26	HMU	6	4	8	5	P	0
5014	26	HMU	6	4	9	5	A	1
5015	26	HMU	6	4	10	5	P	0
5016	26	HMU	6	4	11	5	P	0
5017	26	MSA	1	5	1	5	P	0
5018	26	MSA	1	5	2	5	A	1
5019	26	MSA	1	5	3	5	P	0
5020	26	MSA	1	5	4	5	A	1
5021	26	MSA	1	5	5	5	A	1
5022	26	MSA	1	5	6	5	P	0
5023	26	MSA	1	5	7	5	A	1
5024	26	MSA	1	5	8	5	P	0
5025	26	MSA	1	5	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5026	26	MSA	1	5	10	5	P	0
5027	26	MSA	1	5	11	5	P	0
5028	26	MSA	2	4	1	5	P	0
5029	26	MSA	2	4	2	5	A	1
5030	26	MSA	2	4	3	5	A	1
5031	26	MSA	2	4	4	5	P	0
5032	26	MSA	2	4	5	5	P	0
5033	26	MSA	2	4	6	5	A	1
5034	26	MSA	2	4	7	5	A	1
5035	26	MSA	2	4	8	5	P	0
5036	26	MSA	2	4	9	5	A	1
5037	26	MSA	2	4	10	5	A	1
5038	26	MSA	2	4	11	5	P	0
5039	26	MSA	3	8	1	5	A	1
5040	26	MSA	3	8	2	5	A	1
5041	26	MSA	3	8	3	5	A	1
5042	26	MSA	3	8	4	5	P	0
5043	26	MSA	3	8	5	5	P	0
5044	26	MSA	3	8	6	5	P	0
5045	26	MSA	3	8	7	5	P	0
5046	26	MSA	3	8	8	5	P	0
5047	26	MSA	3	8	9	5	A	1
5048	26	MSA	3	8	10	5	P	0
5049	26	MSA	3	8	11	5	P	0
5050	26	MSA	4	6	1	5	P	0
5051	26	MSA	4	6	2	5	P	0
5052	26	MSA	4	6	3	5	A	1
5053	26	MSA	4	6	4	5	A	1
5054	26	MSA	4	6	5	5	A	1
5055	26	MSA	4	6	6	5	P	0
5056	26	MSA	4	6	7	5	P	0
5057	26	MSA	4	6	8	5	P	0
5058	26	MSA	4	6	9	5	P	0
5059	26	MSA	4	6	10	5	P	0
5060	26	MSA	4	6	11	5	P	0
5061	26	MSA	5	8	1	5	P	0
5062	26	MSA	5	8	2	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5063	26	MSA	5	8	3	5	P	0
5064	26	MSA	5	8	4	5	P	0
5065	26	MSA	5	8	5	5	P	0
5066	26	MSA	5	8	6	5	A	1
5067	26	MSA	5	8	7	5	A	1
5068	26	MSA	5	8	8	5	P	0
5069	26	MSA	5	8	9	5	A	1
5070	26	MSA	5	8	10	5	P	0
5071	26	MSA	5	8	11	5	A	1
5072	26	MSA	6	4	1	5	P	0
5073	26	MSA	6	4	2	5	A	1
5074	26	MSA	6	4	3	5	P	0
5075	26	MSA	6	4	4	5	P	0
5076	26	MSA	6	4	5	5	A	1
5077	26	MSA	6	4	6	5	A	1
5078	26	MSA	6	4	7	5	P	0
5079	26	MSA	6	4	8	5	P	0
5080	26	MSA	6	4	9	5	P	0
5081	26	MSA	6	4	10	5	P	0
5082	26	MSA	6	4	11	5	A	1
5083	26	REF	1	5	1	5	P	0
5084	26	REF	1	5	2	5	A	1
5085	26	REF	1	5	3	5	A	1
5086	26	REF	1	5	4	5	A	1
5087	26	REF	1	5	5	5	P	0
5088	26	REF	1	5	6	5	P	0
5089	26	REF	1	5	7	5	P	0
5090	26	REF	1	5	8	5	A	1
5091	26	REF	1	5	9	5	A	1
5092	26	REF	1	5	10	5	P	0
5093	26	REF	1	5	11	5	A	1
5094	26	REF	2	4	1	5	A	1
5095	26	REF	2	4	2	5	A	1
5096	26	REF	2	4	3	5	A	1
5097	26	REF	2	4	4	5	A	1
5098	26	REF	2	4	5	5	A	1
5099	26	REF	2	4	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5100	26	REF	2	4	7	5	A	1
5101	26	REF	2	4	8	5	A	1
5102	26	REF	2	4	9	5	A	1
5103	26	REF	2	4	10	5	A	1
5104	26	REF	2	4	11	5	P	0
5105	26	REF	3	8	1	5	P	0
5106	26	REF	3	8	2	5	P	0
5107	26	REF	3	8	3	5	A	1
5108	26	REF	3	8	4	5	A	1
5109	26	REF	3	8	5	5	A	1
5110	26	REF	3	8	6	5	P	0
5111	26	REF	3	8	7	5	P	0
5112	26	REF	3	8	8	5	P	0
5113	26	REF	3	8	9	5	P	0
5114	26	REF	3	8	10	5	P	0
5115	26	REF	3	8	11	5	P	0
5116	26	REF	4	6	1	5	A	1
5117	26	REF	4	6	2	5	A	1
5118	26	REF	4	6	3	5	A	1
5119	26	REF	4	6	4	5	P	0
5120	26	REF	4	6	5	5	P	0
5121	26	REF	4	6	6	5	P	0
5122	26	REF	4	6	7	5	A	1
5123	26	REF	4	6	8	5	P	0
5124	26	REF	4	6	9	5	P	0
5125	26	REF	4	6	10	5	P	0
5126	26	REF	4	6	11	5	A	1
5127	26	REF	5	8	1	5	A	1
5128	26	REF	5	8	2	5	A	1
5129	26	REF	5	8	3	5	A	1
5130	26	REF	5	8	4	5	P	0
5131	26	REF	5	8	5	5	A	1
5132	26	REF	5	8	6	5	P	0
5133	26	REF	5	8	7	5	A	1
5134	26	REF	5	8	8	5	A	1
5135	26	REF	5	8	9	5	A	1
5136	26	REF	5	8	10	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5137	26	REF	5	8	11	5	P	0
5138	26	REF	6	4	1	5	P	0
5139	26	REF	6	4	2	5	P	0
5140	26	REF	6	4	3	5	P	0
5141	26	REF	6	4	4	5	A	1
5142	26	REF	6	4	5	5	A	1
5143	26	REF	6	4	6	5	P	0
5144	26	REF	6	4	7	5	P	0
5145	26	REF	6	4	8	5	P	0
5146	26	REF	6	4	9	5	A	1
5147	26	REF	6	4	10	5	A	1
5148	26	REF	6	4	11	5	A	1
5149	27	HMU	1	6	1	5	P	0
5150	27	HMU	1	6	2	5	P	0
5151	27	HMU	1	6	3	5	P	0
5152	27	HMU	1	6	4	5	P	0
5153	27	HMU	1	6	5	5	P	0
5154	27	HMU	1	6	6	5	P	0
5155	27	HMU	1	6	7	5	P	0
5156	27	HMU	1	6	8	5	P	0
5157	27	HMU	1	6	9	5	P	0
5158	27	HMU	1	6	10	5	P	0
5159	27	HMU	1	6	11	5	P	0
5160	27	HMU	2	1	1	5	P	0
5161	27	HMU	2	1	2	5	P	0
5162	27	HMU	2	1	3	5	A	1
5163	27	HMU	2	1	4	5	A	1
5164	27	HMU	2	1	5	5	P	0
5165	27	HMU	2	1	6	5	A	1
5166	27	HMU	2	1	7	5	P	0
5167	27	HMU	2	1	8	5	A	1
5168	27	HMU	2	1	9	5	P	0
5169	27	HMU	2	1	10	5	P	0
5170	27	HMU	2	1	11	5	P	0
5171	27	HMU	3	4	1	5	P	0
5172	27	HMU	3	4	2	5	P	0
5173	27	HMU	3	4	3	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5174	27	HMU	3	4	4	5	P	0
5175	27	HMU	3	4	5	5	P	0
5176	27	HMU	3	4	6	5	A	1
5177	27	HMU	3	4	7	5	A	1
5178	27	HMU	3	4	8	5	P	0
5179	27	HMU	3	4	9	5	P	0
5180	27	HMU	3	4	10	5	P	0
5181	27	HMU	3	4	11	5	A	1
5182	27	HMU	4	8	1	5	P	0
5183	27	HMU	4	8	2	5	P	0
5184	27	HMU	4	8	3	5	P	0
5185	27	HMU	4	8	4	5	P	0
5186	27	HMU	4	8	5	5	P	0
5187	27	HMU	4	8	6	5	P	0
5188	27	HMU	4	8	7	5	P	0
5189	27	HMU	4	8	8	5	P	0
5190	27	HMU	4	8	9	5	P	0
5191	27	HMU	4	8	10	5	P	0
5192	27	HMU	4	8	11	5	A	1
5193	27	HMU	5	9	1	5	P	0
5194	27	HMU	5	9	2	5	P	0
5195	27	HMU	5	9	3	5	P	0
5196	27	HMU	5	9	4	5	A	1
5197	27	HMU	5	9	5	5	A	1
5198	27	HMU	5	9	6	5	P	0
5199	27	HMU	5	9	7	5	P	0
5200	27	HMU	5	9	8	5	P	0
5201	27	HMU	5	9	9	5	P	0
5202	27	HMU	5	9	10	5	P	0
5203	27	HMU	5	9	11	5	P	0
5204	27	HMU	6	9	1	5	P	0
5205	27	HMU	6	9	2	5	P	0
5206	27	HMU	6	9	3	5	P	0
5207	27	HMU	6	9	4	5	P	0
5208	27	HMU	6	9	5	5	P	0
5209	27	HMU	6	9	6	5	P	0
5210	27	HMU	6	9	7	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5211	27	HMU	6	9	8	5	P	0
5212	27	HMU	6	9	9	5	P	0
5213	27	HMU	6	9	10	5	P	0
5214	27	HMU	6	9	11	5	P	0
5215	27	MSA	1	6	1	5	P	0
5216	27	MSA	1	6	2	5	P	0
5217	27	MSA	1	6	3	5	P	0
5218	27	MSA	1	6	4	5	P	0
5219	27	MSA	1	6	5	5	P	0
5220	27	MSA	1	6	6	5	A	1
5221	27	MSA	1	6	7	5	P	0
5222	27	MSA	1	6	8	5	A	1
5223	27	MSA	1	6	9	5	P	0
5224	27	MSA	1	6	10	5	P	0
5225	27	MSA	1	6	11	5	P	0
5226	27	MSA	2	1	1	5	P	0
5227	27	MSA	2	1	2	5	A	1
5228	27	MSA	2	1	3	5	P	0
5229	27	MSA	2	1	4	5	A	1
5230	27	MSA	2	1	5	5	A	1
5231	27	MSA	2	1	6	5	A	1
5232	27	MSA	2	1	7	5	A	1
5233	27	MSA	2	1	8	5	A	1
5234	27	MSA	2	1	9	5	P	0
5235	27	MSA	2	1	10	5	A	1
5236	27	MSA	2	1	11	5	A	1
5237	27	MSA	3	4	1	5	P	0
5238	27	MSA	3	4	2	5	P	0
5239	27	MSA	3	4	3	5	A	1
5240	27	MSA	3	4	4	5	P	0
5241	27	MSA	3	4	5	5	P	0
5242	27	MSA	3	4	6	5	A	1
5243	27	MSA	3	4	7	5	P	0
5244	27	MSA	3	4	8	5	P	0
5245	27	MSA	3	4	9	5	A	1
5246	27	MSA	3	4	10	5	A	1
5247	27	MSA	3	4	11	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5248	27	MSA	4	8	1	5	A	1
5249	27	MSA	4	8	2	5	P	0
5250	27	MSA	4	8	3	5	P	0
5251	27	MSA	4	8	4	5	P	0
5252	27	MSA	4	8	5	5	A	1
5253	27	MSA	4	8	6	5	A	1
5254	27	MSA	4	8	7	5	A	1
5255	27	MSA	4	8	8	5	P	0
5256	27	MSA	4	8	9	5	P	0
5257	27	MSA	4	8	10	5	A	1
5258	27	MSA	4	8	11	5	P	0
5259	27	MSA	5	9	1	5	P	0
5260	27	MSA	5	9	2	5	P	0
5261	27	MSA	5	9	3	5	A	1
5262	27	MSA	5	9	4	5	A	1
5263	27	MSA	5	9	5	5	A	1
5264	27	MSA	5	9	6	5	A	1
5265	27	MSA	5	9	7	5	P	0
5266	27	MSA	5	9	8	5	P	0
5267	27	MSA	5	9	9	5	A	1
5268	27	MSA	5	9	10	5	P	0
5269	27	MSA	5	9	11	5	P	0
5270	27	MSA	6	9	1	5	P	0
5271	27	MSA	6	9	2	5	P	0
5272	27	MSA	6	9	3	5	P	0
5273	27	MSA	6	9	4	5	P	0
5274	27	MSA	6	9	5	5	A	1
5275	27	MSA	6	9	6	5	P	0
5276	27	MSA	6	9	7	5	P	0
5277	27	MSA	6	9	8	5	A	1
5278	27	MSA	6	9	9	5	P	0
5279	27	MSA	6	9	10	5	P	0
5280	27	MSA	6	9	11	5	P	0
5281	27	REF	1	6	1	5	A	1
5282	27	REF	1	6	2	5	P	0
5283	27	REF	1	6	3	5	A	1
5284	27	REF	1	6	4	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5285	27	REF	1	6	5	5	A	1
5286	27	REF	1	6	6	5	P	0
5287	27	REF	1	6	7	5	A	1
5288	27	REF	1	6	8	5	P	0
5289	27	REF	1	6	9	5	P	0
5290	27	REF	1	6	10	5	P	0
5291	27	REF	1	6	11	5	A	1
5292	27	REF	2	1	1	5	P	0
5293	27	REF	2	1	2	5	P	0
5294	27	REF	2	1	3	5	A	1
5295	27	REF	2	1	4	5	P	0
5296	27	REF	2	1	5	5	P	0
5297	27	REF	2	1	6	5	P	0
5298	27	REF	2	1	7	5	A	1
5299	27	REF	2	1	8	5	A	1
5300	27	REF	2	1	9	5	A	1
5301	27	REF	2	1	10	5	A	1
5302	27	REF	2	1	11	5	P	0
5303	27	REF	3	4	1	5	P	0
5304	27	REF	3	4	2	5	P	0
5305	27	REF	3	4	3	5	P	0
5306	27	REF	3	4	4	5	P	0
5307	27	REF	3	4	5	5	P	0
5308	27	REF	3	4	6	5	P	0
5309	27	REF	3	4	7	5	P	0
5310	27	REF	3	4	8	5	P	0
5311	27	REF	3	4	9	5	P	0
5312	27	REF	3	4	10	5	P	0
5313	27	REF	3	4	11	5	A	1
5314	27	REF	4	8	1	5	A	1
5315	27	REF	4	8	2	5	A	1
5316	27	REF	4	8	3	5	A	1
5317	27	REF	4	8	4	5	A	1
5318	27	REF	4	8	5	5	P	0
5319	27	REF	4	8	6	5	P	0
5320	27	REF	4	8	7	5	A	1
5321	27	REF	4	8	8	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5322	27	REF	4	8	9	5	P	0
5323	27	REF	4	8	10	5	P	0
5324	27	REF	4	8	11	5	P	0
5325	27	REF	5	9	1	5	A	1
5326	27	REF	5	9	2	5	P	0
5327	27	REF	5	9	3	5	A	1
5328	27	REF	5	9	4	5	P	0
5329	27	REF	5	9	5	5	A	1
5330	27	REF	5	9	6	5	P	0
5331	27	REF	5	9	7	5	P	0
5332	27	REF	5	9	8	5	P	0
5333	27	REF	5	9	9	5	P	0
5334	27	REF	5	9	10	5	P	0
5335	27	REF	5	9	11	5	P	0
5336	27	REF	6	9	1	5	P	0
5337	27	REF	6	9	2	5	P	0
5338	27	REF	6	9	3	5	A	1
5339	27	REF	6	9	4	5	P	0
5340	27	REF	6	9	5	5	P	0
5341	27	REF	6	9	6	5	A	1
5342	27	REF	6	9	7	5	A	1
5343	27	REF	6	9	8	5	P	0
5344	27	REF	6	9	9	5	A	1
5345	27	REF	6	9	10	5	P	0
5346	27	REF	6	9	11	5	A	1
5347	28	HMU	1	3	1	5	P	0
5348	28	HMU	1	3	2	5	A	1
5349	28	HMU	1	3	3	5	P	0
5350	28	HMU	1	3	4	5	P	0
5351	28	HMU	1	3	5	5	P	0
5352	28	HMU	1	3	6	5	P	0
5353	28	HMU	1	3	7	5	P	0
5354	28	HMU	1	3	8	5	A	1
5355	28	HMU	1	3	9	5	A	1
5356	28	HMU	1	3	10	5	P	0
5357	28	HMU	1	3	11	5	P	0
5358	28	HMU	2	5	1	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5359	28	HMU	2	5	2	5	P	0
5360	28	HMU	2	5	3	5	A	1
5361	28	HMU	2	5	4	5	P	0
5362	28	HMU	2	5	5	5	P	0
5363	28	HMU	2	5	6	5	P	0
5364	28	HMU	2	5	7	5	A	1
5365	28	HMU	2	5	8	5	P	0
5366	28	HMU	2	5	9	5	A	1
5367	28	HMU	2	5	10	5	A	1
5368	28	HMU	2	5	11	5	A	1
5369	28	HMU	3	5	1	5	A	1
5370	28	HMU	3	5	2	5	A	1
5371	28	HMU	3	5	3	5	P	0
5372	28	HMU	3	5	4	5	P	0
5373	28	HMU	3	5	5	5	P	0
5374	28	HMU	3	5	6	5	P	0
5375	28	HMU	3	5	7	5	A	1
5376	28	HMU	3	5	8	5	P	0
5377	28	HMU	3	5	9	5	P	0
5378	28	HMU	3	5	10	5	A	1
5379	28	HMU	3	5	11	5	P	0
5380	28	HMU	4	4	1	5	P	0
5381	28	HMU	4	4	2	5	P	0
5382	28	HMU	4	4	3	5	P	0
5383	28	HMU	4	4	4	5	P	0
5384	28	HMU	4	4	5	5	P	0
5385	28	HMU	4	4	6	5	P	0
5386	28	HMU	4	4	7	5	P	0
5387	28	HMU	4	4	8	5	P	0
5388	28	HMU	4	4	9	5	P	0
5389	28	HMU	4	4	10	5	P	0
5390	28	HMU	4	4	11	5	P	0
5391	28	HMU	5	4	1	5	A	1
5392	28	HMU	5	4	2	5	P	0
5393	28	HMU	5	4	3	5	P	0
5394	28	HMU	5	4	4	5	P	0
5395	28	HMU	5	4	5	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5396	28	HMU	5	4	6	5	P	0
5397	28	HMU	5	4	7	5	P	0
5398	28	HMU	5	4	8	5	A	1
5399	28	HMU	5	4	9	5	P	0
5400	28	HMU	5	4	10	5	P	0
5401	28	HMU	5	4	11	5	P	0
5402	28	HMU	6	5	1	5	P	0
5403	28	HMU	6	5	2	5	P	0
5404	28	HMU	6	5	3	5	P	0
5405	28	HMU	6	5	4	5	P	0
5406	28	HMU	6	5	5	5	P	0
5407	28	HMU	6	5	6	5	P	0
5408	28	HMU	6	5	7	5	P	0
5409	28	HMU	6	5	8	5	A	1
5410	28	HMU	6	5	9	5	A	1
5411	28	HMU	6	5	10	5	P	0
5412	28	HMU	6	5	11	5	A	1
5413	28	MSA	1	3	1	5	P	0
5414	28	MSA	1	3	2	5	P	0
5415	28	MSA	1	3	3	5	P	0
5416	28	MSA	1	3	4	5	A	1
5417	28	MSA	1	3	5	5	P	0
5418	28	MSA	1	3	6	5	P	0
5419	28	MSA	1	3	7	5	P	0
5420	28	MSA	1	3	8	5	P	0
5421	28	MSA	1	3	9	5	P	0
5422	28	MSA	1	3	10	5	P	0
5423	28	MSA	1	3	11	5	P	0
5424	28	MSA	2	5	1	5	A	1
5425	28	MSA	2	5	2	5	P	0
5426	28	MSA	2	5	3	5	P	0
5427	28	MSA	2	5	4	5	A	1
5428	28	MSA	2	5	5	5	P	0
5429	28	MSA	2	5	6	5	P	0
5430	28	MSA	2	5	7	5	P	0
5431	28	MSA	2	5	8	5	P	0
5432	28	MSA	2	5	9	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5433	28	MSA	2	5	10	5	P	0
5434	28	MSA	2	5	11	5	P	0
5435	28	MSA	3	5	1	5	A	1
5436	28	MSA	3	5	2	5	P	0
5437	28	MSA	3	5	3	5	P	0
5438	28	MSA	3	5	4	5	P	0
5439	28	MSA	3	5	5	5	P	0
5440	28	MSA	3	5	6	5	P	0
5441	28	MSA	3	5	7	5	P	0
5442	28	MSA	3	5	8	5	P	0
5443	28	MSA	3	5	9	5	P	0
5444	28	MSA	3	5	10	5	P	0
5445	28	MSA	3	5	11	5	A	1
5446	28	MSA	4	4	1	5	A	1
5447	28	MSA	4	4	2	5	P	0
5448	28	MSA	4	4	3	5	A	1
5449	28	MSA	4	4	4	5	P	0
5450	28	MSA	4	4	5	5	P	0
5451	28	MSA	4	4	6	5	P	0
5452	28	MSA	4	4	7	5	P	0
5453	28	MSA	4	4	8	5	P	0
5454	28	MSA	4	4	9	5	P	0
5455	28	MSA	4	4	10	5	P	0
5456	28	MSA	4	4	11	5	P	0
5457	28	MSA	5	4	1	5	A	1
5458	28	MSA	5	4	2	5	P	0
5459	28	MSA	5	4	3	5	P	0
5460	28	MSA	5	4	4	5	P	0
5461	28	MSA	5	4	5	5	P	0
5462	28	MSA	5	4	6	5	P	0
5463	28	MSA	5	4	7	5	P	0
5464	28	MSA	5	4	8	5	P	0
5465	28	MSA	5	4	9	5	P	0
5466	28	MSA	5	4	10	5	A	1
5467	28	MSA	5	4	11	5	P	0
5468	28	MSA	6	5	1	5	P	0
5469	28	MSA	6	5	2	5	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5470	28	MSA	6	5	3	5	A	1
5471	28	MSA	6	5	4	5	A	1
5472	28	MSA	6	5	5	5	P	0
5473	28	MSA	6	5	6	5	P	0
5474	28	MSA	6	5	7	5	P	0
5475	28	MSA	6	5	8	5	A	1
5476	28	MSA	6	5	9	5	P	0
5477	28	MSA	6	5	10	5	P	0
5478	28	MSA	6	5	11	5	P	0
5479	28	REF	1	3	1	5	P	0
5480	28	REF	1	3	2	5	A	1
5481	28	REF	1	3	3	5	P	0
5482	28	REF	1	3	4	5	A	1
5483	28	REF	1	3	5	5	A	1
5484	28	REF	1	3	6	5	A	1
5485	28	REF	1	3	7	5	P	0
5486	28	REF	1	3	8	5	P	0
5487	28	REF	1	3	9	5	A	1
5488	28	REF	1	3	10	5	P	0
5489	28	REF	1	3	11	5	P	0
5490	28	REF	2	5	1	5	A	1
5491	28	REF	2	5	2	5	A	1
5492	28	REF	2	5	3	5	A	1
5493	28	REF	2	5	4	5	A	1
5494	28	REF	2	5	5	5	A	1
5495	28	REF	2	5	6	5	A	1
5496	28	REF	2	5	7	5	A	1
5497	28	REF	2	5	8	5	A	1
5498	28	REF	2	5	9	5	A	1
5499	28	REF	2	5	10	5	A	1
5500	28	REF	2	5	11	5	P	0
5501	28	REF	3	5	1	5	P	0
5502	28	REF	3	5	2	5	P	0
5503	28	REF	3	5	3	5	P	0
5504	28	REF	3	5	4	5	P	0
5505	28	REF	3	5	5	5	P	0
5506	28	REF	3	5	6	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5507	28	REF	3	5	7	5	P	0
5508	28	REF	3	5	8	5	P	0
5509	28	REF	3	5	9	5	A	1
5510	28	REF	3	5	10	5	A	1
5511	28	REF	3	5	11	5	A	1
5512	28	REF	4	4	1	5	A	1
5513	28	REF	4	4	2	5	A	1
5514	28	REF	4	4	3	5	A	1
5515	28	REF	4	4	4	5	P	0
5516	28	REF	4	4	5	5	A	1
5517	28	REF	4	4	6	5	A	1
5518	28	REF	4	4	7	5	A	1
5519	28	REF	4	4	8	5	A	1
5520	28	REF	4	4	9	5	A	1
5521	28	REF	4	4	10	5	P	0
5522	28	REF	4	4	11	5	A	1
5523	28	REF	5	4	1	5	P	0
5524	28	REF	5	4	2	5	P	0
5525	28	REF	5	4	3	5	P	0
5526	28	REF	5	4	4	5	A	1
5527	28	REF	5	4	5	5	P	0
5528	28	REF	5	4	6	5	P	0
5529	28	REF	5	4	7	5	P	0
5530	28	REF	5	4	8	5	P	0
5531	28	REF	5	4	9	5	P	0
5532	28	REF	5	4	10	5	P	0
5533	28	REF	5	4	11	5	A	1
5534	28	REF	6	5	1	5	P	0
5535	28	REF	6	5	2	5	P	0
5536	28	REF	6	5	3	5	P	0
5537	28	REF	6	5	4	5	A	1
5538	28	REF	6	5	5	5	A	1
5539	28	REF	6	5	6	5	P	0
5540	28	REF	6	5	7	5	A	1
5541	28	REF	6	5	8	5	A	1
5542	28	REF	6	5	9	5	P	0
5543	28	REF	6	5	10	5	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5544	28	REF	6	5	11	5	A	1
5545	29	HMU	1	1	1	6	P	0
5546	29	HMU	1	1	2	6	P	0
5547	29	HMU	1	1	3	6	P	0
5548	29	HMU	1	1	4	6	P	0
5549	29	HMU	1	1	5	6	P	0
5550	29	HMU	1	1	6	6	P	0
5551	29	HMU	1	1	7	6	P	0
5552	29	HMU	1	1	8	6	P	0
5553	29	HMU	1	1	9	6	P	0
5554	29	HMU	1	1	10	6	P	0
5555	29	HMU	1	1	11	6	P	0
5556	29	HMU	2	6	1	6	P	0
5557	29	HMU	2	6	2	6	P	0
5558	29	HMU	2	6	3	6	P	0
5559	29	HMU	2	6	4	6	P	0
5560	29	HMU	2	6	5	6	P	0
5561	29	HMU	2	6	6	6	P	0
5562	29	HMU	2	6	7	6	P	0
5563	29	HMU	2	6	8	6	P	0
5564	29	HMU	2	6	9	6	P	0
5565	29	HMU	2	6	10	6	P	0
5566	29	HMU	2	6	11	6	P	0
5567	29	HMU	3	9	1	6	P	0
5568	29	HMU	3	9	2	6	P	0
5569	29	HMU	3	9	3	6	P	0
5570	29	HMU	3	9	4	6	P	0
5571	29	HMU	3	9	5	6	P	0
5572	29	HMU	3	9	6	6	A	1
5573	29	HMU	3	9	7	6	A	1
5574	29	HMU	3	9	8	6	P	0
5575	29	HMU	3	9	9	6	P	0
5576	29	HMU	3	9	10	6	P	0
5577	29	HMU	3	9	11	6	P	0
5578	29	HMU	4	9	1	6	P	0
5579	29	HMU	4	9	2	6	P	0
5580	29	HMU	4	9	3	6	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5581	29	HMU	4	9	4	6	P	0
5582	29	HMU	4	9	5	6	P	0
5583	29	HMU	4	9	6	6	P	0
5584	29	HMU	4	9	7	6	P	0
5585	29	HMU	4	9	8	6	P	0
5586	29	HMU	4	9	9	6	P	0
5587	29	HMU	4	9	10	6	P	0
5588	29	HMU	4	9	11	6	P	0
5589	29	HMU	5	2	1	6	P	0
5590	29	HMU	5	2	2	6	P	0
5591	29	HMU	5	2	3	6	P	0
5592	29	HMU	5	2	4	6	P	0
5593	29	HMU	5	2	5	6	P	0
5594	29	HMU	5	2	6	6	P	0
5595	29	HMU	5	2	7	6	P	0
5596	29	HMU	5	2	8	6	P	0
5597	29	HMU	5	2	9	6	P	0
5598	29	HMU	5	2	10	6	P	0
5599	29	HMU	5	2	11	6	P	0
5600	29	HMU	6	2	1	6	P	0
5601	29	HMU	6	2	2	6	P	0
5602	29	HMU	6	2	3	6	P	0
5603	29	HMU	6	2	4	6	P	0
5604	29	HMU	6	2	5	6	P	0
5605	29	HMU	6	2	6	6	P	0
5606	29	HMU	6	2	7	6	P	0
5607	29	HMU	6	2	8	6	P	0
5608	29	HMU	6	2	9	6	P	0
5609	29	HMU	6	2	10	6	P	0
5610	29	HMU	6	2	11	6	P	0
5611	29	MSA	1	1	1	6	P	0
5612	29	MSA	1	1	2	6	P	0
5613	29	MSA	1	1	3	6	A	1
5614	29	MSA	1	1	4	6	P	0
5615	29	MSA	1	1	5	6	P	0
5616	29	MSA	1	1	6	6	P	0
5617	29	MSA	1	1	7	6	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5618	29	MSA	1	1	8	6	A	1
5619	29	MSA	1	1	9	6	P	0
5620	29	MSA	1	1	10	6	P	0
5621	29	MSA	1	1	11	6	P	0
5622	29	MSA	2	6	1	6	P	0
5623	29	MSA	2	6	2	6	P	0
5624	29	MSA	2	6	3	6	P	0
5625	29	MSA	2	6	4	6	P	0
5626	29	MSA	2	6	5	6	P	0
5627	29	MSA	2	6	6	6	P	0
5628	29	MSA	2	6	7	6	P	0
5629	29	MSA	2	6	8	6	P	0
5630	29	MSA	2	6	9	6	P	0
5631	29	MSA	2	6	10	6	P	0
5632	29	MSA	2	6	11	6	P	0
5633	29	MSA	3	9	1	6	P	0
5634	29	MSA	3	9	2	6	P	0
5635	29	MSA	3	9	3	6	P	0
5636	29	MSA	3	9	4	6	P	0
5637	29	MSA	3	9	5	6	P	0
5638	29	MSA	3	9	6	6	P	0
5639	29	MSA	3	9	7	6	P	0
5640	29	MSA	3	9	8	6	P	0
5641	29	MSA	3	9	9	6	P	0
5642	29	MSA	3	9	10	6	A	1
5643	29	MSA	3	9	11	6	A	1
5644	29	MSA	4	9	1	6	A	1
5645	29	MSA	4	9	2	6	P	0
5646	29	MSA	4	9	3	6	P	0
5647	29	MSA	4	9	4	6	P	0
5648	29	MSA	4	9	5	6	P	0
5649	29	MSA	4	9	6	6	A	1
5650	29	MSA	4	9	7	6	P	0
5651	29	MSA	4	9	8	6	A	1
5652	29	MSA	4	9	9	6	P	0
5653	29	MSA	4	9	10	6	P	0
5654	29	MSA	4	9	11	6	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5655	29	MSA	5	2	1	6	P	0
5656	29	MSA	5	2	2	6	P	0
5657	29	MSA	5	2	3	6	P	0
5658	29	MSA	5	2	4	6	A	1
5659	29	MSA	5	2	5	6	P	0
5660	29	MSA	5	2	6	6	P	0
5661	29	MSA	5	2	7	6	P	0
5662	29	MSA	5	2	8	6	P	0
5663	29	MSA	5	2	9	6	P	0
5664	29	MSA	5	2	10	6	P	0
5665	29	MSA	5	2	11	6	P	0
5666	29	MSA	6	2	1	6	P	0
5667	29	MSA	6	2	2	6	P	0
5668	29	MSA	6	2	3	6	P	0
5669	29	MSA	6	2	4	6	P	0
5670	29	MSA	6	2	5	6	P	0
5671	29	MSA	6	2	6	6	P	0
5672	29	MSA	6	2	7	6	P	0
5673	29	MSA	6	2	8	6	P	0
5674	29	MSA	6	2	9	6	P	0
5675	29	MSA	6	2	10	6	P	0
5676	29	MSA	6	2	11	6	P	0
5677	29	REF	1	1	1	6	P	0
5678	29	REF	1	1	2	6	P	0
5679	29	REF	1	1	3	6	P	0
5680	29	REF	1	1	4	6	A	1
5681	29	REF	1	1	5	6	A	1
5682	29	REF	1	1	6	6	P	0
5683	29	REF	1	1	7	6	P	0
5684	29	REF	1	1	8	6	P	0
5685	29	REF	1	1	9	6	A	1
5686	29	REF	1	1	10	6	A	1
5687	29	REF	1	1	11	6	A	1
5688	29	REF	2	6	1	6	A	1
5689	29	REF	2	6	2	6	A	1
5690	29	REF	2	6	3	6	A	1
5691	29	REF	2	6	4	6	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5692	29	REF	2	6	5	6	A	1
5693	29	REF	2	6	6	6	A	1
5694	29	REF	2	6	7	6	A	1
5695	29	REF	2	6	8	6	A	1
5696	29	REF	2	6	9	6	A	1
5697	29	REF	2	6	10	6	P	0
5698	29	REF	2	6	11	6	A	1
5699	29	REF	3	9	1	6	A	1
5700	29	REF	3	9	2	6	A	1
5701	29	REF	3	9	3	6	P	0
5702	29	REF	3	9	4	6	P	0
5703	29	REF	3	9	5	6	P	0
5704	29	REF	3	9	6	6	A	1
5705	29	REF	3	9	7	6	A	1
5706	29	REF	3	9	8	6	A	1
5707	29	REF	3	9	9	6	P	0
5708	29	REF	3	9	10	6	A	1
5709	29	REF	3	9	11	6	P	0
5710	29	REF	4	9	1	6	P	0
5711	29	REF	4	9	2	6	P	0
5712	29	REF	4	9	3	6	A	1
5713	29	REF	4	9	4	6	A	1
5714	29	REF	4	9	5	6	P	0
5715	29	REF	4	9	6	6	A	1
5716	29	REF	4	9	7	6	P	0
5717	29	REF	4	9	8	6	P	0
5718	29	REF	4	9	9	6	A	1
5719	29	REF	4	9	10	6	P	0
5720	29	REF	4	9	11	6	P	0
5721	29	REF	5	2	1	6	P	0
5722	29	REF	5	2	2	6	P	0
5723	29	REF	5	2	3	6	P	0
5724	29	REF	5	2	4	6	A	1
5725	29	REF	5	2	5	6	A	1
5726	29	REF	5	2	6	6	A	1
5727	29	REF	5	2	7	6	P	0
5728	29	REF	5	2	8	6	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5729	29	REF	5	2	9	6	P	0
5730	29	REF	5	2	10	6	P	0
5731	29	REF	5	2	11	6	P	0
5732	29	REF	6	2	1	6	A	1
5733	29	REF	6	2	2	6	P	0
5734	29	REF	6	2	3	6	A	1
5735	29	REF	6	2	4	6	P	0
5736	29	REF	6	2	5	6	A	1
5737	29	REF	6	2	6	6	P	0
5738	29	REF	6	2	7	6	A	1
5739	29	REF	6	2	8	6	A	1
5740	29	REF	6	2	9	6	A	1
5741	29	REF	6	2	10	6	A	1
5742	29	REF	6	2	11	6	P	0
5743	30	HMU	1	9	1	7	P	0
5744	30	HMU	1	9	2	7	P	0
5745	30	HMU	1	9	3	7	P	0
5746	30	HMU	1	9	4	7	P	0
5747	30	HMU	1	9	5	7	P	0
5748	30	HMU	1	9	6	7	P	0
5749	30	HMU	1	9	7	7	P	0
5750	30	HMU	1	9	8	7	A	1
5751	30	HMU	1	9	9	7	A	1
5752	30	HMU	1	9	10	7	P	0
5753	30	HMU	1	9	11	7	P	0
5754	30	HMU	2	7	1	7	P	0
5755	30	HMU	2	7	2	7	P	0
5756	30	HMU	2	7	3	7	P	0
5757	30	HMU	2	7	4	7	A	1
5758	30	HMU	2	7	5	7	P	0
5759	30	HMU	2	7	6	7	P	0
5760	30	HMU	2	7	7	7	P	0
5761	30	HMU	2	7	8	7	P	0
5762	30	HMU	2	7	9	7	P	0
5763	30	HMU	2	7	10	7	P	0
5764	30	HMU	2	7	11	7	P	0
5765	30	HMU	3	2	1	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5766	30	HMU	3	2	2	7	A	1
5767	30	HMU	3	2	3	7	P	0
5768	30	HMU	3	2	4	7	P	0
5769	30	HMU	3	2	5	7	P	0
5770	30	HMU	3	2	6	7	P	0
5771	30	HMU	3	2	7	7	P	0
5772	30	HMU	3	2	8	7	P	0
5773	30	HMU	3	2	9	7	P	0
5774	30	HMU	3	2	10	7	P	0
5775	30	HMU	3	2	11	7	P	0
5776	30	HMU	4	4	1	7	P	0
5777	30	HMU	4	4	2	7	P	0
5778	30	HMU	4	4	3	7	P	0
5779	30	HMU	4	4	4	7	P	0
5780	30	HMU	4	4	5	7	P	0
5781	30	HMU	4	4	6	7	P	0
5782	30	HMU	4	4	7	7	P	0
5783	30	HMU	4	4	8	7	P	0
5784	30	HMU	4	4	9	7	P	0
5785	30	HMU	4	4	10	7	P	0
5786	30	HMU	4	4	11	7	P	0
5787	30	HMU	5	1	1	7	P	0
5788	30	HMU	5	1	2	7	P	0
5789	30	HMU	5	1	3	7	P	0
5790	30	HMU	5	1	4	7	P	0
5791	30	HMU	5	1	5	7	P	0
5792	30	HMU	5	1	6	7	P	0
5793	30	HMU	5	1	7	7	P	0
5794	30	HMU	5	1	8	7	P	0
5795	30	HMU	5	1	9	7	P	0
5796	30	HMU	5	1	10	7	P	0
5797	30	HMU	5	1	11	7	P	0
5798	30	HMU	6	2	1	7	P	0
5799	30	HMU	6	2	2	7	P	0
5800	30	HMU	6	2	3	7	P	0
5801	30	HMU	6	2	4	7	P	0
5802	30	HMU	6	2	5	7	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5803	30	HMU	6	2	6	7	P	0
5804	30	HMU	6	2	7	7	P	0
5805	30	HMU	6	2	8	7	P	0
5806	30	HMU	6	2	9	7	P	0
5807	30	HMU	6	2	10	7	P	0
5808	30	HMU	6	2	11	7	P	0
5809	30	MSA	1	9	1	7	P	0
5810	30	MSA	1	9	2	7	P	0
5811	30	MSA	1	9	3	7	P	0
5812	30	MSA	1	9	4	7	P	0
5813	30	MSA	1	9	5	7	P	0
5814	30	MSA	1	9	6	7	P	0
5815	30	MSA	1	9	7	7	P	0
5816	30	MSA	1	9	8	7	P	0
5817	30	MSA	1	9	9	7	P	0
5818	30	MSA	1	9	10	7	P	0
5819	30	MSA	1	9	11	7	P	0
5820	30	MSA	2	7	1	7	A	1
5821	30	MSA	2	7	2	7	P	0
5822	30	MSA	2	7	3	7	P	0
5823	30	MSA	2	7	4	7	P	0
5824	30	MSA	2	7	5	7	P	0
5825	30	MSA	2	7	6	7	P	0
5826	30	MSA	2	7	7	7	P	0
5827	30	MSA	2	7	8	7	P	0
5828	30	MSA	2	7	9	7	P	0
5829	30	MSA	2	7	10	7	P	0
5830	30	MSA	2	7	11	7	P	0
5831	30	MSA	3	2	1	7	P	0
5832	30	MSA	3	2	2	7	P	0
5833	30	MSA	3	2	3	7	P	0
5834	30	MSA	3	2	4	7	P	0
5835	30	MSA	3	2	5	7	P	0
5836	30	MSA	3	2	6	7	P	0
5837	30	MSA	3	2	7	7	P	0
5838	30	MSA	3	2	8	7	P	0
5839	30	MSA	3	2	9	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5840	30	MSA	3	2	10	7	P	0
5841	30	MSA	3	2	11	7	P	0
5842	30	MSA	4	4	1	7	P	0
5843	30	MSA	4	4	2	7	P	0
5844	30	MSA	4	4	3	7	P	0
5845	30	MSA	4	4	4	7	P	0
5846	30	MSA	4	4	5	7	P	0
5847	30	MSA	4	4	6	7	P	0
5848	30	MSA	4	4	7	7	P	0
5849	30	MSA	4	4	8	7	A	1
5850	30	MSA	4	4	9	7	A	1
5851	30	MSA	4	4	10	7	A	1
5852	30	MSA	4	4	11	7	P	0
5853	30	MSA	5	1	1	7	P	0
5854	30	MSA	5	1	2	7	P	0
5855	30	MSA	5	1	3	7	P	0
5856	30	MSA	5	1	4	7	P	0
5857	30	MSA	5	1	5	7	P	0
5858	30	MSA	5	1	6	7	P	0
5859	30	MSA	5	1	7	7	P	0
5860	30	MSA	5	1	8	7	P	0
5861	30	MSA	5	1	9	7	P	0
5862	30	MSA	5	1	10	7	P	0
5863	30	MSA	5	1	11	7	P	0
5864	30	MSA	6	2	1	7	A	1
5865	30	MSA	6	2	2	7	P	0
5866	30	MSA	6	2	3	7	P	0
5867	30	MSA	6	2	4	7	P	0
5868	30	MSA	6	2	5	7	P	0
5869	30	MSA	6	2	6	7	A	1
5870	30	MSA	6	2	7	7	P	0
5871	30	MSA	6	2	8	7	P	0
5872	30	MSA	6	2	9	7	P	0
5873	30	MSA	6	2	10	7	P	0
5874	30	MSA	6	2	11	7	P	0
5875	30	REF	1	9	1	7	A	1
5876	30	REF	1	9	2	7	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5877	30	REF	1	9	3	7	P	0
5878	30	REF	1	9	4	7	A	1
5879	30	REF	1	9	5	7	A	1
5880	30	REF	1	9	6	7	A	1
5881	30	REF	1	9	7	7	P	0
5882	30	REF	1	9	8	7	A	1
5883	30	REF	1	9	9	7	A	1
5884	30	REF	1	9	10	7	A	1
5885	30	REF	1	9	11	7	A	1
5886	30	REF	2	7	1	7	A	1
5887	30	REF	2	7	2	7	A	1
5888	30	REF	2	7	3	7	A	1
5889	30	REF	2	7	4	7	A	1
5890	30	REF	2	7	5	7	A	1
5891	30	REF	2	7	6	7	A	1
5892	30	REF	2	7	7	7	A	1
5893	30	REF	2	7	8	7	A	1
5894	30	REF	2	7	9	7	P	0
5895	30	REF	2	7	10	7	A	1
5896	30	REF	2	7	11	7	A	1
5897	30	REF	3	2	1	7	P	0
5898	30	REF	3	2	2	7	P	0
5899	30	REF	3	2	3	7	A	1
5900	30	REF	3	2	4	7	A	1
5901	30	REF	3	2	5	7	A	1
5902	30	REF	3	2	6	7	A	1
5903	30	REF	3	2	7	7	A	1
5904	30	REF	3	2	8	7	P	0
5905	30	REF	3	2	9	7	A	1
5906	30	REF	3	2	10	7	A	1
5907	30	REF	3	2	11	7	P	0
5908	30	REF	4	4	1	7	A	1
5909	30	REF	4	4	2	7	A	1
5910	30	REF	4	4	3	7	A	1
5911	30	REF	4	4	4	7	A	1
5912	30	REF	4	4	5	7	P	0
5913	30	REF	4	4	6	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5914	30	REF	4	4	7	7	A	1
5915	30	REF	4	4	8	7	A	1
5916	30	REF	4	4	9	7	A	1
5917	30	REF	4	4	10	7	A	1
5918	30	REF	4	4	11	7	A	1
5919	30	REF	5	1	1	7	P	0
5920	30	REF	5	1	2	7	P	0
5921	30	REF	5	1	3	7	P	0
5922	30	REF	5	1	4	7	P	0
5923	30	REF	5	1	5	7	P	0
5924	30	REF	5	1	6	7	A	1
5925	30	REF	5	1	7	7	P	0
5926	30	REF	5	1	8	7	A	1
5927	30	REF	5	1	9	7	P	0
5928	30	REF	5	1	10	7	A	1
5929	30	REF	5	1	11	7	P	0
5930	30	REF	6	2	1	7	A	1
5931	30	REF	6	2	2	7	A	1
5932	30	REF	6	2	3	7	P	0
5933	30	REF	6	2	4	7	P	0
5934	30	REF	6	2	5	7	A	1
5935	30	REF	6	2	6	7	P	0
5936	30	REF	6	2	7	7	P	0
5937	30	REF	6	2	8	7	P	0
5938	30	REF	6	2	9	7	A	1
5939	30	REF	6	2	10	7	A	1
5940	30	REF	6	2	11	7	P	0
5941	31	HMU	1	1	1	7	P	0
5942	31	HMU	1	1	2	7	P	0
5943	31	HMU	1	1	3	7	P	0
5944	31	HMU	1	1	4	7	P	0
5945	31	HMU	1	1	5	7	P	0
5946	31	HMU	1	1	6	7	A	1
5947	31	HMU	1	1	7	7	P	0
5948	31	HMU	1	1	8	7	P	0
5949	31	HMU	1	1	9	7	P	0
5950	31	HMU	1	1	10	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5951	31	HMU	1	1	11	7	P	0
5952	31	HMU	2	8	1	7	A	1
5953	31	HMU	2	8	2	7	P	0
5954	31	HMU	2	8	3	7	P	0
5955	31	HMU	2	8	4	7	P	0
5956	31	HMU	2	8	5	7	P	0
5957	31	HMU	2	8	6	7	P	0
5958	31	HMU	2	8	7	7	P	0
5959	31	HMU	2	8	8	7	P	0
5960	31	HMU	2	8	9	7	P	0
5961	31	HMU	2	8	10	7	P	0
5962	31	HMU	2	8	11	7	P	0
5963	31	HMU	3	6	1	7	P	0
5964	31	HMU	3	6	2	7	P	0
5965	31	HMU	3	6	3	7	P	0
5966	31	HMU	3	6	4	7	P	0
5967	31	HMU	3	6	5	7	P	0
5968	31	HMU	3	6	6	7	P	0
5969	31	HMU	3	6	7	7	P	0
5970	31	HMU	3	6	8	7	P	0
5971	31	HMU	3	6	9	7	A	1
5972	31	HMU	3	6	10	7	P	0
5973	31	HMU	3	6	11	7	P	0
5974	31	HMU	4	3	1	7	P	0
5975	31	HMU	4	3	2	7	P	0
5976	31	HMU	4	3	3	7	P	0
5977	31	HMU	4	3	4	7	P	0
5978	31	HMU	4	3	5	7	P	0
5979	31	HMU	4	3	6	7	P	0
5980	31	HMU	4	3	7	7	P	0
5981	31	HMU	4	3	8	7	P	0
5982	31	HMU	4	3	9	7	P	0
5983	31	HMU	4	3	10	7	P	0
5984	31	HMU	4	3	11	7	P	0
5985	31	HMU	5	8	1	7	A	1
5986	31	HMU	5	8	2	7	P	0
5987	31	HMU	5	8	3	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
5988	31	HMU	5	8	4	7	P	0
5989	31	HMU	5	8	5	7	P	0
5990	31	HMU	5	8	6	7	P	0
5991	31	HMU	5	8	7	7	P	0
5992	31	HMU	5	8	8	7	P	0
5993	31	HMU	5	8	9	7	A	1
5994	31	HMU	5	8	10	7	P	0
5995	31	HMU	5	8	11	7	P	0
5996	31	HMU	6	1	1	7	A	1
5997	31	HMU	6	1	2	7	P	0
5998	31	HMU	6	1	3	7	P	0
5999	31	HMU	6	1	4	7	P	0
6000	31	HMU	6	1	5	7	P	0
6001	31	HMU	6	1	6	7	P	0
6002	31	HMU	6	1	7	7	P	0
6003	31	HMU	6	1	8	7	P	0
6004	31	HMU	6	1	9	7	P	0
6005	31	HMU	6	1	10	7	P	0
6006	31	HMU	6	1	11	7	P	0
6007	31	MSA	1	1	1	7	P	0
6008	31	MSA	1	1	2	7	P	0
6009	31	MSA	1	1	3	7	P	0
6010	31	MSA	1	1	4	7	P	0
6011	31	MSA	1	1	5	7	P	0
6012	31	MSA	1	1	6	7	A	1
6013	31	MSA	1	1	7	7	P	0
6014	31	MSA	1	1	8	7	P	0
6015	31	MSA	1	1	9	7	P	0
6016	31	MSA	1	1	10	7	P	0
6017	31	MSA	1	1	11	7	P	0
6018	31	MSA	2	8	1	7	P	0
6019	31	MSA	2	8	2	7	P	0
6020	31	MSA	2	8	3	7	P	0
6021	31	MSA	2	8	4	7	P	0
6022	31	MSA	2	8	5	7	P	0
6023	31	MSA	2	8	6	7	P	0
6024	31	MSA	2	8	7	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6025	31	MSA	2	8	8	7	P	0
6026	31	MSA	2	8	9	7	P	0
6027	31	MSA	2	8	10	7	P	0
6028	31	MSA	2	8	11	7	P	0
6029	31	MSA	3	6	1	7	P	0
6030	31	MSA	3	6	2	7	P	0
6031	31	MSA	3	6	3	7	P	0
6032	31	MSA	3	6	4	7	P	0
6033	31	MSA	3	6	5	7	P	0
6034	31	MSA	3	6	6	7	P	0
6035	31	MSA	3	6	7	7	P	0
6036	31	MSA	3	6	8	7	P	0
6037	31	MSA	3	6	9	7	P	0
6038	31	MSA	3	6	10	7	P	0
6039	31	MSA	3	6	11	7	P	0
6040	31	MSA	4	3	1	7	P	0
6041	31	MSA	4	3	2	7	P	0
6042	31	MSA	4	3	3	7	P	0
6043	31	MSA	4	3	4	7	P	0
6044	31	MSA	4	3	5	7	P	0
6045	31	MSA	4	3	6	7	P	0
6046	31	MSA	4	3	7	7	A	1
6047	31	MSA	4	3	8	7	P	0
6048	31	MSA	4	3	9	7	P	0
6049	31	MSA	4	3	10	7	P	0
6050	31	MSA	4	3	11	7	P	0
6051	31	MSA	5	8	1	7	P	0
6052	31	MSA	5	8	2	7	P	0
6053	31	MSA	5	8	3	7	P	0
6054	31	MSA	5	8	4	7	P	0
6055	31	MSA	5	8	5	7	P	0
6056	31	MSA	5	8	6	7	P	0
6057	31	MSA	5	8	7	7	P	0
6058	31	MSA	5	8	8	7	P	0
6059	31	MSA	5	8	9	7	A	1
6060	31	MSA	5	8	10	7	A	1
6061	31	MSA	5	8	11	7	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6062	31	MSA	6	1	1	7	P	0
6063	31	MSA	6	1	2	7	P	0
6064	31	MSA	6	1	3	7	P	0
6065	31	MSA	6	1	4	7	P	0
6066	31	MSA	6	1	5	7	P	0
6067	31	MSA	6	1	6	7	P	0
6068	31	MSA	6	1	7	7	P	0
6069	31	MSA	6	1	8	7	P	0
6070	31	MSA	6	1	9	7	P	0
6071	31	MSA	6	1	10	7	A	1
6072	31	MSA	6	1	11	7	P	0
6073	31	REF	1	1	1	7	P	0
6074	31	REF	1	1	2	7	P	0
6075	31	REF	1	1	3	7	A	1
6076	31	REF	1	1	4	7	A	1
6077	31	REF	1	1	5	7	A	1
6078	31	REF	1	1	6	7	A	1
6079	31	REF	1	1	7	7	P	0
6080	31	REF	1	1	8	7	A	1
6081	31	REF	1	1	9	7	P	0
6082	31	REF	1	1	10	7	A	1
6083	31	REF	1	1	11	7	P	0
6084	31	REF	2	8	1	7	A	1
6085	31	REF	2	8	2	7	A	1
6086	31	REF	2	8	3	7	P	0
6087	31	REF	2	8	4	7	P	0
6088	31	REF	2	8	5	7	P	0
6089	31	REF	2	8	6	7	P	0
6090	31	REF	2	8	7	7	A	1
6091	31	REF	2	8	8	7	A	1
6092	31	REF	2	8	9	7	A	1
6093	31	REF	2	8	10	7	A	1
6094	31	REF	2	8	11	7	A	1
6095	31	REF	3	6	1	7	P	0
6096	31	REF	3	6	2	7	A	1
6097	31	REF	3	6	3	7	P	0
6098	31	REF	3	6	4	7	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6099	31	REF	3	6	5	7	P	0
6100	31	REF	3	6	6	7	P	0
6101	31	REF	3	6	7	7	P	0
6102	31	REF	3	6	8	7	A	1
6103	31	REF	3	6	9	7	A	1
6104	31	REF	3	6	10	7	P	0
6105	31	REF	3	6	11	7	P	0
6106	31	REF	4	3	1	7	A	1
6107	31	REF	4	3	2	7	A	1
6108	31	REF	4	3	3	7	A	1
6109	31	REF	4	3	4	7	A	1
6110	31	REF	4	3	5	7	A	1
6111	31	REF	4	3	6	7	A	1
6112	31	REF	4	3	7	7	P	0
6113	31	REF	4	3	8	7	A	1
6114	31	REF	4	3	9	7	P	0
6115	31	REF	4	3	10	7	A	1
6116	31	REF	4	3	11	7	A	1
6117	31	REF	5	8	1	7	A	1
6118	31	REF	5	8	2	7	P	0
6119	31	REF	5	8	3	7	P	0
6120	31	REF	5	8	4	7	P	0
6121	31	REF	5	8	5	7	P	0
6122	31	REF	5	8	6	7	P	0
6123	31	REF	5	8	7	7	A	1
6124	31	REF	5	8	8	7	P	0
6125	31	REF	5	8	9	7	P	0
6126	31	REF	5	8	10	7	A	1
6127	31	REF	5	8	11	7	A	1
6128	31	REF	6	1	1	7	A	1
6129	31	REF	6	1	2	7	P	0
6130	31	REF	6	1	3	7	P	0
6131	31	REF	6	1	4	7	P	0
6132	31	REF	6	1	5	7	P	0
6133	31	REF	6	1	6	7	A	1
6134	31	REF	6	1	7	7	A	1
6135	31	REF	6	1	8	7	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6136	31	REF	6	1	9	7	P	0
6137	31	REF	6	1	10	7	P	0
6138	31	REF	6	1	11	7	A	1
6139	32	HMU	1	8	1	8	P	0
6140	32	HMU	1	8	2	8	A	1
6141	32	HMU	1	8	3	8	P	0
6142	32	HMU	1	8	4	8	A	1
6143	32	HMU	1	8	5	8	P	0
6144	32	HMU	1	8	6	8	P	0
6145	32	HMU	1	8	7	8	P	0
6146	32	HMU	1	8	8	8	P	0
6147	32	HMU	1	8	9	8	P	0
6148	32	HMU	1	8	10	8	P	0
6149	32	HMU	1	8	11	8	P	0
6150	32	HMU	2	5	1	8	P	0
6151	32	HMU	2	5	2	8	P	0
6152	32	HMU	2	5	3	8	P	0
6153	32	HMU	2	5	4	8	P	0
6154	32	HMU	2	5	5	8	P	0
6155	32	HMU	2	5	6	8	P	0
6156	32	HMU	2	5	7	8	P	0
6157	32	HMU	2	5	8	8	P	0
6158	32	HMU	2	5	9	8	P	0
6159	32	HMU	2	5	10	8	P	0
6160	32	HMU	2	5	11	8	P	0
6161	32	HMU	3	1	1	8	P	0
6162	32	HMU	3	1	2	8	P	0
6163	32	HMU	3	1	3	8	P	0
6164	32	HMU	3	1	4	8	P	0
6165	32	HMU	3	1	5	8	A	1
6166	32	HMU	3	1	6	8	P	0
6167	32	HMU	3	1	7	8	P	0
6168	32	HMU	3	1	8	8	P	0
6169	32	HMU	3	1	9	8	P	0
6170	32	HMU	3	1	10	8	P	0
6171	32	HMU	3	1	11	8	P	0
6172	32	HMU	4	5	1	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6173	32	HMU	4	5	2	8	P	0
6174	32	HMU	4	5	3	8	A	1
6175	32	HMU	4	5	4	8	P	0
6176	32	HMU	4	5	5	8	P	0
6177	32	HMU	4	5	6	8	P	0
6178	32	HMU	4	5	7	8	P	0
6179	32	HMU	4	5	8	8	P	0
6180	32	HMU	4	5	9	8	P	0
6181	32	HMU	4	5	10	8	P	0
6182	32	HMU	4	5	11	8	P	0
6183	32	HMU	5	9	1	8	A	1
6184	32	HMU	5	9	2	8	P	0
6185	32	HMU	5	9	3	8	P	0
6186	32	HMU	5	9	4	8	P	0
6187	32	HMU	5	9	5	8	P	0
6188	32	HMU	5	9	6	8	P	0
6189	32	HMU	5	9	7	8	A	1
6190	32	HMU	5	9	8	8	A	1
6191	32	HMU	5	9	9	8	P	0
6192	32	HMU	5	9	10	8	P	0
6193	32	HMU	5	9	11	8	P	0
6194	32	HMU	6	6	1	8	P	0
6195	32	HMU	6	6	2	8	P	0
6196	32	HMU	6	6	3	8	P	0
6197	32	HMU	6	6	4	8	P	0
6198	32	HMU	6	6	5	8	P	0
6199	32	HMU	6	6	6	8	P	0
6200	32	HMU	6	6	7	8	P	0
6201	32	HMU	6	6	8	8	P	0
6202	32	HMU	6	6	9	8	P	0
6203	32	HMU	6	6	10	8	P	0
6204	32	HMU	6	6	11	8	P	0
6205	32	MSA	1	8	1	8	P	0
6206	32	MSA	1	8	2	8	P	0
6207	32	MSA	1	8	3	8	P	0
6208	32	MSA	1	8	4	8	P	0
6209	32	MSA	1	8	5	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6210	32	MSA	1	8	6	8	P	0
6211	32	MSA	1	8	7	8	P	0
6212	32	MSA	1	8	8	8	P	0
6213	32	MSA	1	8	9	8	P	0
6214	32	MSA	1	8	10	8	P	0
6215	32	MSA	1	8	11	8	P	0
6216	32	MSA	2	5	1	8	P	0
6217	32	MSA	2	5	2	8	P	0
6218	32	MSA	2	5	3	8	P	0
6219	32	MSA	2	5	4	8	P	0
6220	32	MSA	2	5	5	8	P	0
6221	32	MSA	2	5	6	8	P	0
6222	32	MSA	2	5	7	8	P	0
6223	32	MSA	2	5	8	8	P	0
6224	32	MSA	2	5	9	8	P	0
6225	32	MSA	2	5	10	8	P	0
6226	32	MSA	2	5	11	8	P	0
6227	32	MSA	3	1	1	8	P	0
6228	32	MSA	3	1	2	8	P	0
6229	32	MSA	3	1	3	8	A	1
6230	32	MSA	3	1	4	8	P	0
6231	32	MSA	3	1	5	8	P	0
6232	32	MSA	3	1	6	8	P	0
6233	32	MSA	3	1	7	8	P	0
6234	32	MSA	3	1	8	8	P	0
6235	32	MSA	3	1	9	8	P	0
6236	32	MSA	3	1	10	8	P	0
6237	32	MSA	3	1	11	8	P	0
6238	32	MSA	4	5	1	8	P	0
6239	32	MSA	4	5	2	8	P	0
6240	32	MSA	4	5	3	8	P	0
6241	32	MSA	4	5	4	8	P	0
6242	32	MSA	4	5	5	8	P	0
6243	32	MSA	4	5	6	8	P	0
6244	32	MSA	4	5	7	8	P	0
6245	32	MSA	4	5	8	8	P	0
6246	32	MSA	4	5	9	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6247	32	MSA	4	5	10	8	P	0
6248	32	MSA	4	5	11	8	P	0
6249	32	MSA	5	9	1	8	P	0
6250	32	MSA	5	9	2	8	P	0
6251	32	MSA	5	9	3	8	P	0
6252	32	MSA	5	9	4	8	P	0
6253	32	MSA	5	9	5	8	P	0
6254	32	MSA	5	9	6	8	P	0
6255	32	MSA	5	9	7	8	P	0
6256	32	MSA	5	9	8	8	P	0
6257	32	MSA	5	9	9	8	P	0
6258	32	MSA	5	9	10	8	P	0
6259	32	MSA	5	9	11	8	P	0
6260	32	MSA	6	6	1	8	P	0
6261	32	MSA	6	6	2	8	P	0
6262	32	MSA	6	6	3	8	P	0
6263	32	MSA	6	6	4	8	P	0
6264	32	MSA	6	6	5	8	P	0
6265	32	MSA	6	6	6	8	P	0
6266	32	MSA	6	6	7	8	P	0
6267	32	MSA	6	6	8	8	A	1
6268	32	MSA	6	6	9	8	P	0
6269	32	MSA	6	6	10	8	P	0
6270	32	MSA	6	6	11	8	P	0
6271	32	REF	1	8	1	8	A	1
6272	32	REF	1	8	2	8	A	1
6273	32	REF	1	8	3	8	P	0
6274	32	REF	1	8	4	8	P	0
6275	32	REF	1	8	5	8	A	1
6276	32	REF	1	8	6	8	A	1
6277	32	REF	1	8	7	8	A	1
6278	32	REF	1	8	8	8	A	1
6279	32	REF	1	8	9	8	A	1
6280	32	REF	1	8	10	8	A	1
6281	32	REF	1	8	11	8	A	1
6282	32	REF	2	5	1	8	A	1
6283	32	REF	2	5	2	8	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6284	32	REF	2	5	3	8	A	1
6285	32	REF	2	5	4	8	P	0
6286	32	REF	2	5	5	8	A	1
6287	32	REF	2	5	6	8	P	0
6288	32	REF	2	5	7	8	A	1
6289	32	REF	2	5	8	8	A	1
6290	32	REF	2	5	9	8	A	1
6291	32	REF	2	5	10	8	A	1
6292	32	REF	2	5	11	8	A	1
6293	32	REF	3	1	1	8	A	1
6294	32	REF	3	1	2	8	P	0
6295	32	REF	3	1	3	8	A	1
6296	32	REF	3	1	4	8	P	0
6297	32	REF	3	1	5	8	A	1
6298	32	REF	3	1	6	8	A	1
6299	32	REF	3	1	7	8	A	1
6300	32	REF	3	1	8	8	A	1
6301	32	REF	3	1	9	8	A	1
6302	32	REF	3	1	10	8	A	1
6303	32	REF	3	1	11	8	P	0
6304	32	REF	4	5	1	8	A	1
6305	32	REF	4	5	2	8	A	1
6306	32	REF	4	5	3	8	A	1
6307	32	REF	4	5	4	8	A	1
6308	32	REF	4	5	5	8	A	1
6309	32	REF	4	5	6	8	A	1
6310	32	REF	4	5	7	8	A	1
6311	32	REF	4	5	8	8	A	1
6312	32	REF	4	5	9	8	A	1
6313	32	REF	4	5	10	8	P	0
6314	32	REF	4	5	11	8	A	1
6315	32	REF	5	9	1	8	A	1
6316	32	REF	5	9	2	8	A	1
6317	32	REF	5	9	3	8	A	1
6318	32	REF	5	9	4	8	P	0
6319	32	REF	5	9	5	8	A	1
6320	32	REF	5	9	6	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6321	32	REF	5	9	7	8	P	0
6322	32	REF	5	9	8	8	A	1
6323	32	REF	5	9	9	8	A	1
6324	32	REF	5	9	10	8	A	1
6325	32	REF	5	9	11	8	A	1
6326	32	REF	6	6	1	8	A	1
6327	32	REF	6	6	2	8	P	0
6328	32	REF	6	6	3	8	P	0
6329	32	REF	6	6	4	8	P	0
6330	32	REF	6	6	5	8	A	1
6331	32	REF	6	6	6	8	A	1
6332	32	REF	6	6	7	8	A	1
6333	32	REF	6	6	8	8	A	1
6334	32	REF	6	6	9	8	A	1
6335	32	REF	6	6	10	8	A	1
6336	32	REF	6	6	11	8	A	1
6337	33	HMU	1	2	1	8	P	0
6338	33	HMU	1	2	2	8	P	0
6339	33	HMU	1	2	3	8	P	0
6340	33	HMU	1	2	4	8	P	0
6341	33	HMU	1	2	5	8	A	1
6342	33	HMU	1	2	6	8	P	0
6343	33	HMU	1	2	7	8	A	1
6344	33	HMU	1	2	8	8	P	0
6345	33	HMU	1	2	9	8	P	0
6346	33	HMU	1	2	10	8	P	0
6347	33	HMU	1	2	11	8	P	0
6348	33	HMU	2	2	1	8	P	0
6349	33	HMU	2	2	2	8	A	1
6350	33	HMU	2	2	3	8	P	0
6351	33	HMU	2	2	4	8	P	0
6352	33	HMU	2	2	5	8	P	0
6353	33	HMU	2	2	6	8	A	1
6354	33	HMU	2	2	7	8	P	0
6355	33	HMU	2	2	8	8	P	0
6356	33	HMU	2	2	9	8	P	0
6357	33	HMU	2	2	10	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6358	33	HMU	2	2	11	8	A	1
6359	33	HMU	3	9	1	8	P	0
6360	33	HMU	3	9	2	8	A	1
6361	33	HMU	3	9	3	8	P	0
6362	33	HMU	3	9	4	8	P	0
6363	33	HMU	3	9	5	8	P	0
6364	33	HMU	3	9	6	8	P	0
6365	33	HMU	3	9	7	8	P	0
6366	33	HMU	3	9	8	8	A	1
6367	33	HMU	3	9	9	8	P	0
6368	33	HMU	3	9	10	8	P	0
6369	33	HMU	3	9	11	8	P	0
6370	33	HMU	4	6	1	8	P	0
6371	33	HMU	4	6	2	8	P	0
6372	33	HMU	4	6	3	8	P	0
6373	33	HMU	4	6	4	8	P	0
6374	33	HMU	4	6	5	8	P	0
6375	33	HMU	4	6	6	8	P	0
6376	33	HMU	4	6	7	8	P	0
6377	33	HMU	4	6	8	8	A	1
6378	33	HMU	4	6	9	8	P	0
6379	33	HMU	4	6	10	8	P	0
6380	33	HMU	4	6	11	8	P	0
6381	33	HMU	5	3	1	8	P	0
6382	33	HMU	5	3	2	8	P	0
6383	33	HMU	5	3	3	8	P	0
6384	33	HMU	5	3	4	8	P	0
6385	33	HMU	5	3	5	8	P	0
6386	33	HMU	5	3	6	8	P	0
6387	33	HMU	5	3	7	8	P	0
6388	33	HMU	5	3	8	8	P	0
6389	33	HMU	5	3	9	8	P	0
6390	33	HMU	5	3	10	8	P	0
6391	33	HMU	5	3	11	8	P	0
6392	33	HMU	6	4	1	8	A	1
6393	33	HMU	6	4	2	8	P	0
6394	33	HMU	6	4	3	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6395	33	HMU	6	4	4	8	P	0
6396	33	HMU	6	4	5	8	P	0
6397	33	HMU	6	4	6	8	P	0
6398	33	HMU	6	4	7	8	P	0
6399	33	HMU	6	4	8	8	P	0
6400	33	HMU	6	4	9	8	P	0
6401	33	HMU	6	4	10	8	P	0
6402	33	HMU	6	4	11	8	P	0
6403	33	MSA	1	2	1	8	P	0
6404	33	MSA	1	2	2	8	P	0
6405	33	MSA	1	2	3	8	P	0
6406	33	MSA	1	2	4	8	P	0
6407	33	MSA	1	2	5	8	P	0
6408	33	MSA	1	2	6	8	P	0
6409	33	MSA	1	2	7	8	P	0
6410	33	MSA	1	2	8	8	P	0
6411	33	MSA	1	2	9	8	P	0
6412	33	MSA	1	2	10	8	A	1
6413	33	MSA	1	2	11	8	A	1
6414	33	MSA	2	2	1	8	P	0
6415	33	MSA	2	2	2	8	P	0
6416	33	MSA	2	2	3	8	P	0
6417	33	MSA	2	2	4	8	P	0
6418	33	MSA	2	2	5	8	P	0
6419	33	MSA	2	2	6	8	P	0
6420	33	MSA	2	2	7	8	P	0
6421	33	MSA	2	2	8	8	P	0
6422	33	MSA	2	2	9	8	P	0
6423	33	MSA	2	2	10	8	P	0
6424	33	MSA	2	2	11	8	A	1
6425	33	MSA	3	9	1	8	P	0
6426	33	MSA	3	9	2	8	P	0
6427	33	MSA	3	9	3	8	P	0
6428	33	MSA	3	9	4	8	P	0
6429	33	MSA	3	9	5	8	P	0
6430	33	MSA	3	9	6	8	P	0
6431	33	MSA	3	9	7	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6432	33	MSA	3	9	8	8	P	0
6433	33	MSA	3	9	9	8	P	0
6434	33	MSA	3	9	10	8	P	0
6435	33	MSA	3	9	11	8	P	0
6436	33	MSA	4	6	1	8	A	1
6437	33	MSA	4	6	2	8	P	0
6438	33	MSA	4	6	3	8	P	0
6439	33	MSA	4	6	4	8	P	0
6440	33	MSA	4	6	5	8	P	0
6441	33	MSA	4	6	6	8	P	0
6442	33	MSA	4	6	7	8	P	0
6443	33	MSA	4	6	8	8	P	0
6444	33	MSA	4	6	9	8	P	0
6445	33	MSA	4	6	10	8	P	0
6446	33	MSA	4	6	11	8	P	0
6447	33	MSA	5	3	1	8	P	0
6448	33	MSA	5	3	2	8	P	0
6449	33	MSA	5	3	3	8	P	0
6450	33	MSA	5	3	4	8	P	0
6451	33	MSA	5	3	5	8	P	0
6452	33	MSA	5	3	6	8	P	0
6453	33	MSA	5	3	7	8	P	0
6454	33	MSA	5	3	8	8	P	0
6455	33	MSA	5	3	9	8	P	0
6456	33	MSA	5	3	10	8	P	0
6457	33	MSA	5	3	11	8	P	0
6458	33	MSA	6	4	1	8	P	0
6459	33	MSA	6	4	2	8	P	0
6460	33	MSA	6	4	3	8	P	0
6461	33	MSA	6	4	4	8	P	0
6462	33	MSA	6	4	5	8	P	0
6463	33	MSA	6	4	6	8	P	0
6464	33	MSA	6	4	7	8	P	0
6465	33	MSA	6	4	8	8	P	0
6466	33	MSA	6	4	9	8	P	0
6467	33	MSA	6	4	10	8	P	0
6468	33	MSA	6	4	11	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6469	33	REF	1	2	1	8	P	0
6470	33	REF	1	2	2	8	A	1
6471	33	REF	1	2	3	8	A	1
6472	33	REF	1	2	4	8	A	1
6473	33	REF	1	2	5	8	A	1
6474	33	REF	1	2	6	8	A	1
6475	33	REF	1	2	7	8	A	1
6476	33	REF	1	2	8	8	A	1
6477	33	REF	1	2	9	8	A	1
6478	33	REF	1	2	10	8	A	1
6479	33	REF	1	2	11	8	A	1
6480	33	REF	2	2	1	8	A	1
6481	33	REF	2	2	2	8	A	1
6482	33	REF	2	2	3	8	A	1
6483	33	REF	2	2	4	8	A	1
6484	33	REF	2	2	5	8	A	1
6485	33	REF	2	2	6	8	P	0
6486	33	REF	2	2	7	8	P	0
6487	33	REF	2	2	8	8	A	1
6488	33	REF	2	2	9	8	A	1
6489	33	REF	2	2	10	8	A	1
6490	33	REF	2	2	11	8	A	1
6491	33	REF	3	9	1	8	P	0
6492	33	REF	3	9	2	8	P	0
6493	33	REF	3	9	3	8	A	1
6494	33	REF	3	9	4	8	A	1
6495	33	REF	3	9	5	8	A	1
6496	33	REF	3	9	6	8	P	0
6497	33	REF	3	9	7	8	P	0
6498	33	REF	3	9	8	8	P	0
6499	33	REF	3	9	9	8	A	1
6500	33	REF	3	9	10	8	P	0
6501	33	REF	3	9	11	8	A	1
6502	33	REF	4	6	1	8	A	1
6503	33	REF	4	6	2	8	A	1
6504	33	REF	4	6	3	8	P	0
6505	33	REF	4	6	4	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6506	33	REF	4	6	5	8	P	0
6507	33	REF	4	6	6	8	A	1
6508	33	REF	4	6	7	8	A	1
6509	33	REF	4	6	8	8	P	0
6510	33	REF	4	6	9	8	P	0
6511	33	REF	4	6	10	8	A	1
6512	33	REF	4	6	11	8	A	1
6513	33	REF	5	3	1	8	P	0
6514	33	REF	5	3	2	8	P	0
6515	33	REF	5	3	3	8	A	1
6516	33	REF	5	3	4	8	A	1
6517	33	REF	5	3	5	8	P	0
6518	33	REF	5	3	6	8	P	0
6519	33	REF	5	3	7	8	P	0
6520	33	REF	5	3	8	8	P	0
6521	33	REF	5	3	9	8	A	1
6522	33	REF	5	3	10	8	A	1
6523	33	REF	5	3	11	8	A	1
6524	33	REF	6	4	1	8	A	1
6525	33	REF	6	4	2	8	P	0
6526	33	REF	6	4	3	8	A	1
6527	33	REF	6	4	4	8	A	1
6528	33	REF	6	4	5	8	A	1
6529	33	REF	6	4	6	8	A	1
6530	33	REF	6	4	7	8	A	1
6531	33	REF	6	4	8	8	A	1
6532	33	REF	6	4	9	8	A	1
6533	33	REF	6	4	10	8	A	1
6534	33	REF	6	4	11	8	A	1
6535	34	HMU	1	4	1	8	P	0
6536	34	HMU	1	4	2	8	P	0
6537	34	HMU	1	4	3	8	P	0
6538	34	HMU	1	4	4	8	P	0
6539	34	HMU	1	4	5	8	P	0
6540	34	HMU	1	4	6	8	P	0
6541	34	HMU	1	4	7	8	P	0
6542	34	HMU	1	4	8	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6543	34	HMU	1	4	9	8	P	0
6544	34	HMU	1	4	10	8	P	0
6545	34	HMU	1	4	11	8	P	0
6546	34	HMU	2	1	1	8	A	1
6547	34	HMU	2	1	2	8	P	0
6548	34	HMU	2	1	3	8	P	0
6549	34	HMU	2	1	4	8	P	0
6550	34	HMU	2	1	5	8	P	0
6551	34	HMU	2	1	6	8	P	0
6552	34	HMU	2	1	7	8	P	0
6553	34	HMU	2	1	8	8	P	0
6554	34	HMU	2	1	9	8	P	0
6555	34	HMU	2	1	10	8	P	0
6556	34	HMU	2	1	11	8	P	0
6557	34	HMU	3	7	1	8	P	0
6558	34	HMU	3	7	2	8	P	0
6559	34	HMU	3	7	3	8	P	0
6560	34	HMU	3	7	4	8	P	0
6561	34	HMU	3	7	5	8	P	0
6562	34	HMU	3	7	6	8	P	0
6563	34	HMU	3	7	7	8	P	0
6564	34	HMU	3	7	8	8	P	0
6565	34	HMU	3	7	9	8	P	0
6566	34	HMU	3	7	10	8	P	0
6567	34	HMU	3	7	11	8	P	0
6568	34	HMU	4	9	1	8	P	0
6569	34	HMU	4	9	2	8	P	0
6570	34	HMU	4	9	3	8	P	0
6571	34	HMU	4	9	4	8	P	0
6572	34	HMU	4	9	5	8	P	0
6573	34	HMU	4	9	6	8	P	0
6574	34	HMU	4	9	7	8	P	0
6575	34	HMU	4	9	8	8	A	1
6576	34	HMU	4	9	9	8	P	0
6577	34	HMU	4	9	10	8	P	0
6578	34	HMU	4	9	11	8	P	0
6579	34	HMU	5	6	1	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6580	34	HMU	5	6	2	8	P	0
6581	34	HMU	5	6	3	8	P	0
6582	34	HMU	5	6	4	8	P	0
6583	34	HMU	5	6	5	8	P	0
6584	34	HMU	5	6	6	8	P	0
6585	34	HMU	5	6	7	8	P	0
6586	34	HMU	5	6	8	8	P	0
6587	34	HMU	5	6	9	8	P	0
6588	34	HMU	5	6	10	8	P	0
6589	34	HMU	5	6	11	8	P	0
6590	34	HMU	6	7	1	8	A	1
6591	34	HMU	6	7	2	8	A	1
6592	34	HMU	6	7	3	8	P	0
6593	34	HMU	6	7	4	8	P	0
6594	34	HMU	6	7	5	8	P	0
6595	34	HMU	6	7	6	8	P	0
6596	34	HMU	6	7	7	8	P	0
6597	34	HMU	6	7	8	8	A	1
6598	34	HMU	6	7	9	8	P	0
6599	34	HMU	6	7	10	8	P	0
6600	34	HMU	6	7	11	8	P	0
6601	34	MSA	1	4	1	8	P	0
6602	34	MSA	1	4	2	8	P	0
6603	34	MSA	1	4	3	8	P	0
6604	34	MSA	1	4	4	8	P	0
6605	34	MSA	1	4	5	8	P	0
6606	34	MSA	1	4	6	8	P	0
6607	34	MSA	1	4	7	8	P	0
6608	34	MSA	1	4	8	8	P	0
6609	34	MSA	1	4	9	8	A	1
6610	34	MSA	1	4	10	8	P	0
6611	34	MSA	1	4	11	8	P	0
6612	34	MSA	2	1	1	8	P	0
6613	34	MSA	2	1	2	8	A	1
6614	34	MSA	2	1	3	8	P	0
6615	34	MSA	2	1	4	8	P	0
6616	34	MSA	2	1	5	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6617	34	MSA	2	1	6	8	P	0
6618	34	MSA	2	1	7	8	P	0
6619	34	MSA	2	1	8	8	P	0
6620	34	MSA	2	1	9	8	P	0
6621	34	MSA	2	1	10	8	P	0
6622	34	MSA	2	1	11	8	P	0
6623	34	MSA	3	7	1	8	P	0
6624	34	MSA	3	7	2	8	P	0
6625	34	MSA	3	7	3	8	A	1
6626	34	MSA	3	7	4	8	P	0
6627	34	MSA	3	7	5	8	P	0
6628	34	MSA	3	7	6	8	P	0
6629	34	MSA	3	7	7	8	P	0
6630	34	MSA	3	7	8	8	P	0
6631	34	MSA	3	7	9	8	P	0
6632	34	MSA	3	7	10	8	P	0
6633	34	MSA	3	7	11	8	P	0
6634	34	MSA	4	9	1	8	A	1
6635	34	MSA	4	9	2	8	P	0
6636	34	MSA	4	9	3	8	P	0
6637	34	MSA	4	9	4	8	P	0
6638	34	MSA	4	9	5	8	P	0
6639	34	MSA	4	9	6	8	P	0
6640	34	MSA	4	9	7	8	P	0
6641	34	MSA	4	9	8	8	P	0
6642	34	MSA	4	9	9	8	P	0
6643	34	MSA	4	9	10	8	P	0
6644	34	MSA	4	9	11	8	P	0
6645	34	MSA	5	6	1	8	P	0
6646	34	MSA	5	6	2	8	P	0
6647	34	MSA	5	6	3	8	P	0
6648	34	MSA	5	6	4	8	P	0
6649	34	MSA	5	6	5	8	P	0
6650	34	MSA	5	6	6	8	P	0
6651	34	MSA	5	6	7	8	P	0
6652	34	MSA	5	6	8	8	P	0
6653	34	MSA	5	6	9	8	P	0

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6654	34	MSA	5	6	10	8	A	1
6655	34	MSA	5	6	11	8	P	0
6656	34	MSA	6	7	1	8	P	0
6657	34	MSA	6	7	2	8	P	0
6658	34	MSA	6	7	3	8	P	0
6659	34	MSA	6	7	4	8	P	0
6660	34	MSA	6	7	5	8	A	1
6661	34	MSA	6	7	6	8	A	1
6662	34	MSA	6	7	7	8	P	0
6663	34	MSA	6	7	8	8	A	1
6664	34	MSA	6	7	9	8	A	1
6665	34	MSA	6	7	10	8	P	0
6666	34	MSA	6	7	11	8	P	0
6667	34	REF	1	4	1	8	P	0
6668	34	REF	1	4	2	8	A	1
6669	34	REF	1	4	3	8	A	1
6670	34	REF	1	4	4	8	A	1
6671	34	REF	1	4	5	8	A	1
6672	34	REF	1	4	6	8	A	1
6673	34	REF	1	4	7	8	A	1
6674	34	REF	1	4	8	8	A	1
6675	34	REF	1	4	9	8	A	1
6676	34	REF	1	4	10	8	P	0
6677	34	REF	1	4	11	8	A	1
6678	34	REF	2	1	1	8	A	1
6679	34	REF	2	1	2	8	A	1
6680	34	REF	2	1	3	8	A	1
6681	34	REF	2	1	4	8	A	1
6682	34	REF	2	1	5	8	P	0
6683	34	REF	2	1	6	8	P	0
6684	34	REF	2	1	7	8	A	1
6685	34	REF	2	1	8	8	P	0
6686	34	REF	2	1	9	8	A	1
6687	34	REF	2	1	10	8	A	1
6688	34	REF	2	1	11	8	A	1
6689	34	REF	3	7	1	8	A	1
6690	34	REF	3	7	2	8	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6691	34	REF	3	7	3	8	A	1
6692	34	REF	3	7	4	8	A	1
6693	34	REF	3	7	5	8	P	0
6694	34	REF	3	7	6	8	A	1
6695	34	REF	3	7	7	8	P	0
6696	34	REF	3	7	8	8	A	1
6697	34	REF	3	7	9	8	A	1
6698	34	REF	3	7	10	8	P	0
6699	34	REF	3	7	11	8	A	1
6700	34	REF	4	9	1	8	A	1
6701	34	REF	4	9	2	8	A	1
6702	34	REF	4	9	3	8	A	1
6703	34	REF	4	9	4	8	A	1
6704	34	REF	4	9	5	8	A	1
6705	34	REF	4	9	6	8	P	0
6706	34	REF	4	9	7	8	P	0
6707	34	REF	4	9	8	8	P	0
6708	34	REF	4	9	9	8	A	1
6709	34	REF	4	9	10	8	P	0
6710	34	REF	4	9	11	8	P	0
6711	34	REF	5	6	1	8	A	1
6712	34	REF	5	6	2	8	A	1
6713	34	REF	5	6	3	8	P	0
6714	34	REF	5	6	4	8	A	1
6715	34	REF	5	6	5	8	A	1
6716	34	REF	5	6	6	8	A	1
6717	34	REF	5	6	7	8	A	1
6718	34	REF	5	6	8	8	P	0
6719	34	REF	5	6	9	8	P	0
6720	34	REF	5	6	10	8	A	1
6721	34	REF	5	6	11	8	A	1
6722	34	REF	6	7	1	8	P	0
6723	34	REF	6	7	2	8	A	1
6724	34	REF	6	7	3	8	A	1
6725	34	REF	6	7	4	8	A	1
6726	34	REF	6	7	5	8	A	1
6727	34	REF	6	7	6	8	A	1

Sample	Monitoring session	Site	Quadrant	Transect	Bait station	Drop Period	Bait Status	Bait Take numeric
6728	34	REF	6	7	7	8	A	1
6729	34	REF	6	7	8	8	A	1
6730	34	REF	6	7	9	8	P	0
6731	34	REF	6	7	10	8	A	1
6732	34	REF	6	7	11	8	A	1

Appendix D: White Paper January 2014

Project Number: **RC-200925**

Principal Investigator: **Dr. Brian Dorr (USDA-WS-NWRC MS Field Station)**

Project Title: **Aerial Application of Acetaminophen-treated Baits for Control of Brown Treesnakes**

Date: 31 January 2014

Action Item: 1. Follow up to comments on Addendum to the Demonstration Plan, submitted 20 December 2013, regarding recommendations for changes to the project's test design and any necessary changes to the Performance Objectives and associated metrics, data requirements, and success criteria that have arisen as part of the initial demonstration experience.

PI and Project Team Response:

Plan Addendum:

1. **Bait Station Monitoring:**
    a. **Issue 1:** The Demonstration Plan (plan) indicates that bait station monitoring of brown tree snake (BTS) activity will occur post bait drop. The plan also implies that some level of interim monitoring will occur but does not specify a frequency for monitoring.
    b. **Recommendation 1:** We recommend a frequency of biweekly monitoring bait stations for BTS activity field test portion of the demonstration project. This level of monitoring will provide a rigorous evaluation of post drop effects and response over time to toxicant bait drops and timely evaluation of the need for further toxicant drops. The biweekly monitoring is logistically feasible for the present project staff level.
    c. **Issue 2:** We do not think the current unadulterated bait station performance metric of a <30% bait take rate is a sufficient measure. Currently the reference site has a bait take rate that averages 37%. Given this the bait take success rate on the drop sites may not be significantly less than the reference site and therefore a significant reduction from the reference site may not be apparent. This would seriously hamper evaluation of effectiveness of the method.
    Recommendation 2: We recommend bait take rate measure similar to that proposed for the VHF marked baits. In this case a $\geq$ 80% reduction from initial bait takes rates. For example, if bait take was 70% after the first drop and 10% after the fourth drop, the reduction in bait take would be 85.7% (70% - 10% = 60%; 60%/70% = 85.7%). We also recommend that drops be considered successful if overall bait take rates are significantly less ($p<0.05$) on the HMU and

MSA as compared to the reference site. This measure allows the use of the study design and spatial and temporal control to evaluate project success. This method also allows an evaluation of significant detectable effect sizes (e.g. 30% absolute difference between sites that are detectable at a given alpha) regarding differences between drop sites and the reference site.

2. **Rodent Monitoring:**
    a. **Issue 1:** The plan indicates that rodent trapping and monitoring activity will occur only post toxicant bait drop. We do not think that rodent monitoring tied only to toxicant bait drops will provide a rigorous evaluation of rodent response to BTS removal. The current monitoring protocol demands monitoring when snake numbers are still high and early in the bait drop period and at random undetermined intervals over the remainder of the bait drop period dependent on snake bait take rate.
    b. **Recommendation 1:** We recommend a more systematic sampling schedule at quarterly intervals throughout the study. This will provide a more rigorous measure of rodent response over the entire bait drop period.
    c. **Recommendation 2:** We recommend pre-baiting and minor changes to bait used and trap design. Coconut is the preferred bait for Pacific island rodents (Dr. Will Pitt personal communication). We also recommend pre-baiting with a standard amount (~250g for each trap set) of shredded coconut < 72 H prior to trapping to maximize trapping efficiency. The Tomahawk type traps have been modified from a foot treadle type trigger (based on mass) to a hanging bait trigger (Hagaruma-style trigger, based on foraging behavior) as the latter trigger type provides greater trap success for *Rattus spp*. (Wiewel et al. 2009).
    d. **Issue 2:** We have extremely low rodent capture rates on the study sites. Given this low capture rate, we think the current success criteria are inadequate. Capture of a single rodent would increase the "population" estimate by 100%, well over the success criteria of < 20% increase. However, an increase of 1-2 rodents is biologically inconsequential and may not reflect any differences from the reference site.
    e. **Recommendation 3:** We recommend a statistical comparison of rodent catch-per-unit effort (CPUE) between sites as a metric of success. If overall rodent CPUE is significantly greater ($p< 0.05$) on the HMU or MSA sites relative to the reference site then it is reasonable to assume that rodent populations have increased. Success would be considered a non-significant difference in CPUE between drop sites and the reference site. This measure uses the randomized sampling and spatial and temporal reference capabilities of the study design to evaluate project success for this metric.

       We also recommend not pit tagging rodents as capture rates are extremely low and measures of individual based population modelling with rats are rarely successful even with robust populations. We do suggest substituting aging individual rodents captured to provide an index of population recruitment (i.e. recruitment of young).

3. **VHF Radio Based BTS Bait Take Rate:**
    a. **Issue:** Subsets of 10 VHF radio marked toxicant baits are dropped on random helicopter transect intervals on all toxicant bait drops. The VHF marked baits are intended to provide 3 plan success metrics: 1) Canopy landing percentage, 2) bait dispersal on helicopter transects and 3) bait fate and take rate.

       Metrics one and two have worked well but metric three has presented some challenges in field application. The basic issue is it appears that snakes are taking the baits but a large number are regurgitating the VHF transmitter, prior to mortality (in lab studies we had 50% regurgitation rate, but still had 100% mortality). So, while we are recovering > 90% of VHF transmitters, we are not finding them in snakes, which makes determination of fate and take rate difficult. Currently we have only been using baits identified in the canopy immediately post drop and later recovered on or near the ground and "clean" (i.e. not attached to a mouse) as an indicator of take rate.

       While the above does reflect an indirect measure of take and can track trends in take rate, we have concerns that it artificially inflates bait take rate. The reason for this is if a bait, located in the canopy were later to fall to the ground prior to take by a BTS, the mouse may be consumed by scavengers on the ground (e.g. terrestrial crabs), which typically leave the VHF transmitter behind. Under this scenario this would be counted as a "take" and this may artificially inflate bait take rate. This could be of particular concern if rodent or terrestrial crab populations increase subsequent to snake removal.

    b. **Recommendation:** Given the above, we think the bait station monitoring data should be the primary metric for determining subsequent bait applications.

4. Investigating BTS eradication feasibility.
    a. **Issue:** Investigating BTS eradication feasibility.
    b. **Recommendation:** We propose that if bait take rate stays below target success levels for 4 consecutive weeks in the MSA and 12 consecutive weeks in the HMU that we then conduct additional bait applications to attempt to reach zero bait take in the HMU, with concurrent drops on the MSA. We do not think that this effort can be completed and rigorously evaluated within the current budget and demonstration plan guidelines. Per consultation with Dr. John Hall we are preparing a study plan and estimated budget. This plan and budget will be provided to assist Dr. Hall and ESTCP in making a determination on further funding support.

<u>Action Item 2</u>. In the Final and Cost & Performance Reports and as part of your cost model development, discuss effects on the range of potential implementation costs that depend on helicopter rental or changes in deployment technology.

1. ESTCP requests an evaluation of the estimated, contracted and actual implementation costs associated helicopter rental or changes in deployment technology.

a. The original demonstration plan includes a cost assessment of aerial bait deployment including helicopter rental costs as labor for aircrew and flight safety personnel. We can include a basic estimate of potential reduced costs associated with future bait deployment technologies.

<u>Action Item 3</u>. “Please evaluate all out-year milestones and provide revised completion dates as needed to Cara Patton (cpatton@hgl.com) by 20 December 2013.”

PI response: Milestones have been updated and provided to Cara as requested.

Appendix E:

Comparison of all mean differences and their simultaneous 95% confidence limits of bait take rates for all bait station monitoring sessions between the first aerial acetaminophen bait drop period and the initiation of the second aerial bait drop period. Simultaneous 95% confidence intervals including zero indicate there were no within site significant increases in bait take rate between monitoring sessions 13 and 23.

HMU					MSA		
Monitoring Sessions Compared	Difference Between Means	Lower 95% CI	Upper 95% CI		Difference Between Means	Lower 95% CI	Upper 95% CI
13 - 14	-0.06061	-0.26594	0.14472		0.0303	-0.20069	0.2613
13 - 15	-0.15152	-0.35685	0.05381		-0.12121	-0.35221	0.10978
13 - 16	-0.0303	-0.23563	0.17503		-0.16667	-0.39767	0.06433
13 - 17	-0.07576	-0.28109	0.12957		-0.06061	-0.2916	0.17039
13 - 18	-0.10606	-0.31139	0.09927		-0.09091	-0.32191	0.14009
13 - 19	-0.12121	-0.32654	0.08412		-0.10606	-0.33706	0.12494
13 - 20	-0.15152	-0.35685	0.05381		-0.0303	-0.2613	0.20069
13 - 21	-0.10606	-0.31139	0.09927		-0.12121	-0.35221	0.10978
13 - 22	-0.06061	-0.26594	0.14472		-0.09091	-0.32191	0.14009
13 - 23	-0.09091	-0.29624	0.11442		-0.07576	-0.30676	0.15524
14 - 15	-0.09091	-0.29624	0.11442		-0.15152	-0.38251	0.07948
14 - 16	0.0303	-0.17503	0.23563		-0.19697	-0.42797	0.03403
14 - 17	-0.01515	-0.22048	0.19018		-0.09091	-0.32191	0.14009
14 - 18	-0.04546	-0.25079	0.15988		-0.12121	-0.35221	0.10978
14 - 19	-0.06061	-0.26594	0.14472		-0.13636	-0.36736	0.09463
14 - 20	-0.09091	-0.29624	0.11442		-0.06061	-0.2916	0.17039
14 - 21	-0.04546	-0.25079	0.15988		-0.15152	-0.38251	0.07948
14 - 22	0	-0.20533	0.20533		-0.12121	-0.35221	0.10978
14 - 23	-0.0303	-0.23563	0.17503		-0.10606	-0.33706	0.12494
15 - 16	0.12121	-0.08412	0.32654		-0.04546	-0.27645	0.18554
15 - 17	0.07576	-0.12957	0.28109		0.06061	-0.17039	0.2916
15 - 18	0.04546	-0.15988	0.25079		0.0303	-0.20069	0.2613
15 - 19	0.0303	-0.17503	0.23563		0.01515	-0.21585	0.24615
15 - 20	0	-0.20533	0.20533		0.09091	-0.14009	0.32191
15 - 21	0.04546	-0.15988	0.25079		0	-0.231	0.231
15 - 22	0.09091	-0.11442	0.29624		0.0303	-0.20069	0.2613
15 - 23	0.06061	-0.14472	0.26594		0.04546	-0.18554	0.27645
16 - 17	-0.04545	-0.25079	0.15988		0.10606	-0.12494	0.33706
16 - 18	-0.07576	-0.28109	0.12957		0.07576	-0.15524	0.30676
16 - 19	-0.09091	-0.29624	0.11442		0.06061	-0.17039	0.2916
16 - 20	-0.12121	-0.32654	0.08412		0.13637	-0.09463	0.36736
16 - 21	-0.07576	-0.28109	0.12957		0.04546	-0.18554	0.27645

HMU					MSA		
Monitoring Sessions Compared	Difference Between Means	Lower 95% CI	Upper 95% CI		Difference Between Means	Lower 95% CI	Upper 95% CI
16 - 22	-0.0303	-0.23563	0.17503		0.07576	-0.15524	0.30676
16 - 23	-0.06061	-0.26594	0.14472		0.09091	-0.14009	0.32191
17 - 18	-0.0303	-0.23563	0.17503		-0.0303	-0.2613	0.20069
17 - 19	-0.04546	-0.25079	0.15988		-0.04545	-0.27645	0.18554
17 - 20	-0.07576	-0.28109	0.12957		0.0303	-0.20069	0.2613
17 - 21	-0.0303	-0.23563	0.17503		-0.06061	-0.2916	0.17039
17 - 22	0.01515	-0.19018	0.22048		-0.0303	-0.2613	0.20069
17 - 23	-0.01515	-0.22048	0.19018		-0.01515	-0.24615	0.21585
18 - 19	-0.01515	-0.22048	0.19018		-0.01515	-0.24615	0.21585
18 - 20	-0.04546	-0.25079	0.15988		0.06061	-0.17039	0.2916
18 - 21	0	-0.20533	0.20533		-0.0303	-0.2613	0.20069
18 - 22	0.04546	-0.15988	0.25079		0	-0.231	0.231
18 - 23	0.01515	-0.19018	0.22048		0.01515	-0.21585	0.24615
19 - 20	-0.0303	-0.23563	0.17503		0.07576	-0.15524	0.30676
19 - 21	0.01515	-0.19018	0.22048		-0.01515	-0.24615	0.21585
19 - 22	0.06061	-0.14472	0.26594		0.01515	-0.21585	0.24615
19 - 23	0.0303	-0.17503	0.23563		0.0303	-0.20069	0.2613
20 - 21	0.04546	-0.15988	0.25079		-0.09091	-0.32191	0.14009
20 - 22	0.09091	-0.11442	0.29624		-0.06061	-0.2916	0.17039
20 - 23	0.06061	-0.14472	0.26594		-0.04546	-0.27645	0.18554
21 - 22	0.04546	-0.15988	0.25079		0.0303	-0.20069	0.2613
21 - 23	0.01515	-0.19018	0.22048		0.04546	-0.18554	0.27645
22 - 23	-0.0303	-0.23563	0.17503		0.01515	-0.21585	0.24615

Appendix F: White Paper 14 May 2013

Project Number: **RC-200925**

Principal Investigator: **Dr. Brian Dorr (USDA-WS-NWRC MS Field Station)**

Project Title: **Aerial Application of Acetaminophen-treated Baits for Control of Brown Treesnakes**

Date: 5/14/2013

Action Item: 1. In a White Paper, due 6 May 2013, please clarify the basis for any of the cost increases above the planning budget amounts in effect at the time of the In-Progress Review (IPR).

PI Response: The additional costs associated with the Demonstration Project RC-200925 “Aerial Application of Acetaminophen-treated Baits for Control of Brown Treesnakes” are largely either directly or indirectly associated with the 2.5 year delay in completion of primarily administrative approvals to allow project startup. Specific areas of additional incurred costs are given below.

1. Re-establishment of about 34 km (21 miles) of monitoring transects on the three 55 ha (136 acre) demonstration sites.
    a. Transects were established in 2010 in preparation of expected bait drops. The delay in project initiation allowed vegetative regrowth on all transects on all three project sites. Costs incurred included labor for re-clearing all 162 of the 210 meter long transects on the 3 project sites.
        i. Estimated Unrecoverable Cost - $84,491

2. Fence maintenance on the Habitat Management Unit (HMU) site.
    a. Fence construction began in 2010. Fence damage due to weather, human activity, vegetation growth causing both physical damage and impairment of effectiveness have incurred additional maintenance and repair costs during the delay in project initiation.
        i. Estimated Unrecoverable Cost - $4,029

3. The cost per hour for helicopter time has increased.
    a. At the initiation of the project in 2009 helicopter time was $2,400/hour. Current charges are FY13- $2,950/hour and FY14 $3,150/hour.
        i. Estimated Unrecoverable Cost - $65,000

4. Purchase 50 new VHF Radio Transmitters (VHF-TX) for radio telemetry marked flagger baits.
    a. The radio transmitters were purchased in 2010. They have a shelf life and would need to be refurbished and replaced. In addition assigned frequencies were released to other users. This required the purchase of new radio transmitters and tracking antennae elements.
        i. Estimated Unrecoverable Cost - $7,394

5. Purchase of new dead neonatal mice (DNM) baits.
    a. The DNM used for monitoring and toxicant baiting have a shelf life of about 2 years. After that point degradation and freezer burn can impair their effectiveness for project use. The delay in use required the purchase of about 30,000 new DNM.
        i. Estimated Unrecoverable Cost - $15,795

6. Increased salary and labor costs due to Cost of Living Adjustments, Within Grade Increases, and promotions since the ESTCP contract was initially awarded in 2009.
    i. Estimated Unrecoverable Cost - $98,465

7. Additional staff costs.
    a. Staff administration and overhead associated with the above listed costs on the project were largely lost and unrecovered due to project delays. These costs are included as indirect and administrative expenses associated with unrecoverable costs and charged at 16.15%.
        i. Estimated Unrecoverable Cost - $44,441

The items 1-7 listed above are costs incurred or projected since the current MIPR was signed July 26, 2012. These costs, including indirect administrative costs are approximately $319,614. This amount reflects the amount above the original proposal amount of 1,553,826 and the additional costs we identified in the February 2013, IPR, ($1,873,440).

The above are estimates, actual figures may differ. A more detailed estimate would require a lengthier budget evaluation process. It may not be possible to account for all unrecoverable costs as costs due to project delay were not tracked as separate categories in the project budget.

Appendix G: Outreach and Social Media

- USDA Wildlife Services Guam State Report - http://www.aphis.usda.gov/wildlife_damage/informational_notebooks/2012/WS%20State%20Operations/11-guam_report.pdf

- USDA Wildlife Services, National Wildlife Research Center brown treesnake research website- http://goo.gl/fT2GBS

- USDA Brown treesnake factsheet - http://www.aphis.usda.gov/publications/wildlife_damage/content/printable_version/fs_brown_tree_snake_2011.pdf

- Brown treesnake FLICKR collection - http://www.flickr.com/photos/usdagov/sets/72157635240222233/

- Brown treesnake video https://www.youtube.com/watch?v=mhiejyayFQ

- Brown tree snake aerial toxicant bait drop preparation video: https://www.youtube.com/watch?v=McfjDt_yfkQ

- Brown treesnake aerial bait drop video - https://www.youtube.com/watch?v=x9MzFNzSlJ0

- Media Day on December 2, 2013, (ABC News Nightline, CNN International, The Verge, Voice of America, Smithsonian, National Geographic Magazine)

- For Additional Brown Tree Snake Information Contact:
  GAIL KEIRN, Legislative and Public Affairs, USDA-APHIS-WS National Wildlife Research Center, 4101 LaPorte Avenue, Fort Collins, CO 80521, Desk: 970-266-6007 | Fax: 970-266-6010, E-mail Gail.M.Keirn@aphis.usda.gov